



# TOWN OF DISCOVERY BAY

A COMMUNITY SERVICES DISTRICT

SDLF Platinum-Level of Governance



President – Bill Pease • Vice-President – Bryon Gutow • Director – Kevin Graves • Director – Robert Leete • Director – Bill Mayer

**NOTICE OF THE REGULAR MEETING  
OF THE STANDING FINANCE COMMITTEE  
OF THE TOWN OF DISCOVERY BAY**

Wednesday, April 1, 2020

3:30 P.M. - 4:30 P.M.

Website address: [www.todb.ca.gov](http://www.todb.ca.gov)

**Finance Committee Members**

*Chair Robert Leete*

*Vice-Chair Bill Mayer*

**NOTICE**  
**Coronavirus COVID-19**

In accordance with the Governor's Executive Order N-33-20, and for the period in which the Order remains in effect, the Town of Discovery Bay Community Services District Committee Chambers will be closed to the public.

To accommodate the public during this period of time that the Committee's Chambers are closed to the public, the Town of Discovery Bay Community Services District Committee Members have arranged for members of the public to observe and address the meeting telephonically.

**TO ATTEND BY TELECONFERENCE:**

Toll-Free Dial-In Number: (866) 848-2216

CONFERENCE ID **5193676302#**

Go to <https://my.intercall.com/9tc7rcq>

Once connected to Unified Meeting:

Select – I Will Call

Click on Join Meeting

Download Agenda Packet and Materials at [www.todb.ca.gov/](http://www.todb.ca.gov/)

**A. ROLL CALL**

1. Call business meeting to order 3:30 p.m.
2. Roll Call.

**B. PUBLIC COMMENTS (Individual Public Comments will be limited to a 3-minute time limit)**

During Public Comments, the public may address the Committee on any issue within the District's jurisdiction which is not on the Agenda. The public may comment on any item on the Agenda at the time the item is before the Committee for consideration. Any person wishing to speak will have 3 minutes to make their comment. There will be no dialog between the Committee and the commenter as the law strictly limits the ability of Committee members to discuss matters not on the agenda. We ask that you refrain from personal attacks during comment, and that you address all comments to the Committee only. Any clarifying questions from the Committee must go through the Chair. Comments from the public do not necessarily reflect the view point of the Committee members.

**C. DRAFT MINUTES TO BE APPROVED**

1. February 5, 2020 DRAFT Regular Finance Committee Meeting Minutes.
2. February 24, 2020 Special Finance Committee Meeting Minutes.
3. March 9, 2020 Special Finance Committee Meeting Minutes.

**D. PRESENTATIONS**

1. Finance Update.

**E. DISCUSSION ITEMS**

1. Discussion Regarding Final Rate Study Options.

**F. FUTURE DISCUSSION/AGENDA ITEMS**

**G. ADJOURNMENT**

1. Adjourn to the next Standing Finance Committee meeting.

"This agenda shall be made available upon request in alternative formats to persons with a disability, as required by the American with Disabilities Act of 1990 (42 U.S.C. § 12132) and the Ralph M. Brown Act (California Government Code § 54954.2). Persons requesting a disability related modification or accommodation in order to participate in the meeting should contact the Town of Discovery Bay, at (925) 634-1131, during regular business hours, at least forty-eight hours prior to the time of the meeting."

"Materials related to an item on the Agenda submitted to the Town of Discovery Bay after distribution of the agenda packet are available for public inspection in the District website located at <https://www.todb.ca.gov>."



# TOWN OF DISCOVERY BAY

A COMMUNITY SERVICES DISTRICT



## SDLF Platinum-Level of Governance

President – Bill Pease • Vice-President – Bryon Gutow • Director – Kevin Graves • Director – Robert Leete • Director – Bill Mayer

### MINUTES OF THE REGULAR MEETING OF THE STANDING FINANCE COMMITTEE OF THE TOWN OF DISCOVERY BAY

Wednesday, February 5, 2020

3:30 P.M. - 4:30 P.M.

Community Center

1601 Discovery Bay Boulevard, Discovery Bay, California

Website address: [www.todb.ca.gov](http://www.todb.ca.gov)

#### Finance Committee Members

*Chair Robert Leete*

*Vice-Chair Bill Mayer*

#### A. ROLL CALL

1. Call business meeting to order 3:30 p.m. – By Chair Leete.
2. Roll Call – All Present.

#### B. PUBLIC COMMENTS (Individual Public Comments will be limited to a 3-minute time limit)

None

#### C. DRAFT MINUTES TO BE APPROVED

1. December 4 2019 DRAFT Regular Finance Committee meeting minutes – Approved.

#### D. PRESENTATIONS

1. Finance Update.  
Finance Manager Carter – Provided the details for the November 2019 Unaudited Financial Statements, with YTD percent comparison for FY 19. Finance Manager Carter highlighted Zone 8 income from PG&E Dewatering and the income from the Hofman Promissory Note payment received. There was discussion regarding the Dewatering (PG&E disposal of water into the Wastewater system).

#### E. DISCUSSION ITEMS

1. Discussion Regarding an Update on the Rate Study.  
Alison Lechowicz from Lechowicz and Tseng Municipal Consultants – Provided the update regarding the DRAFT Rate Study.
  - Water Rate Study Table - Capital Improvement Plan (3 options)
    - Annual Rate Revenue Increases:
      - Option 1 – Maximum debt financing (\$12.8M)
      - Option 2 – Lowest debt financing (\$5M).
      - Option 3 – Middle Option; debt financing of \$8M.
    - Cumulative Rate Revenue Increases
      - Option 1 – Lowest rate; max debt financing (\$13M)
      - Option 2 – Lowest debt financing (\$5M)
      - Option 3 – Middle Option; debt financing of \$8M

All of the options listed above; present a combination of revenues, existing water capital, capacity fee revenues, rate revenues and new debt.

Provided additional details regarding each individual table listed on the handout (2020 Water Rate Study Draft Tables). There was discussion regarding Well No. 8.

General Manager Davies – Provided details regarding the future of Well No. 8; working with Pantages (analysis of the location) the site is a suitable location, moving forward with a right of entry for drilling and approximate time frame is 2 years away.

- Sewer Rate Study Table - (3 options)
  - Annual Rate Revenue Increases:
    - Option 1 – Annual level rate increase; debt financing of \$4M.
    - Option 2 – No debt.
    - Option 3 – Lowest cumulative rate increases; debt financing of \$3M.
  - Cumulative Rate Revenue Increases
    - Option 1 – Annual level rate increases
    - Option 2 – Highest rate increases
    - Option 3 – Lowest cumulative rate increases

Provided additional details regarding each individual table listed on the handout (2020 Sewer Rate Study Draft Tables). There was discussion regarding Denitrification and Plant No. 1 costs (\$13.8m).

Alison - Lechowicz & Tseng Municipal Consultants – Provided the details regarding the handout Single Family Residential Water Bill Survey and Wastewater Bill Survey.

General Manager Davies – Stated the wastewater placement (economy of scale) is the reason for a higher sewer rate.

Public Comment Regarding:

- Project costs, borrowing funds, reserves, financing the pool (borrowing from the wastewater fund).

The discussion continued regarding the Water Rate Study Table options; financing, lowest annual cost to the user, stand-alone well, aging pipes, maintenance and repairs, and the decision for the selection of the 1” water meters.

There was additional discussion regarding a Special meeting to be scheduled.

General Manager Davies – Provided details regarding the Water Quality Control Board new salt requirements study.

There was discussion regarding dates for a Special meeting. The Special Financing Committee meeting is scheduled for Monday, February 24, 2020 at 10:00 a.m.

Public Comment Regarding:

- Prop 218 process.

**2. Discussion Regarding the Audit.**

Finance Manager Carter – Provided an update regarding the Audit (Annual State Filings have been filled on time). There was discussion regarding the Audit Presentation to the Board (March timeframe).

**3. Discussion Regarding the Budget Calendar.**

Finance Manager Carter – Provided the details regarding the Budget Review meeting dates.

**F. FUTURE DISCUSSION/AGENDA ITEMS**

1. Update on Rate Study by Alison Lechowicz from Lechowicz and Tseng Municipal Consultants on February 24, 2020 at 10:00 a.m. (Special Finance Committee Meeting).
2. Solar –To be put on future agenda.

**G. ADJOURNMENT**

1. The meeting adjourned at 4:20 p.m. to the next Standing Finance Committee meeting at the Community Center located at 1601 Discovery Bay Boulevard.

//cmc – 02-07-2020

<http://www.todb.ca.gov/agendas-minutes>



# TOWN OF DISCOVERY BAY

A COMMUNITY SERVICES DISTRICT

SDLF Platinum-Level of Governance



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**MINUTES OF THE SPECIAL MEETING  
OF THE STANDING FINANCE COMMITTEE  
OF THE TOWN OF DISCOVERY BAY**

**Monday, February 24, 2020**

**10:00 A.M.**

**Community Center**

**1601 Discovery Bay Boulevard, Discovery Bay, California**

**Website address: [www.todb.ca.gov](http://www.todb.ca.gov)**

**Finance Committee Members**

*Chair Robert Leete*

*Vice-Chair Bill Mayer*

**A. ROLL CALL**

1. Call business meeting to order 10:03 a.m.
2. Roll Call. All Present

**B. PUBLIC COMMENTS (Individual Public Comments will be limited to a 3-minute time limit)**

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**C. DRAFT MINUTES TO BE APPROVED**

None

**D. PRESENTATIONS**

1. Finance Manager Julie Carter distributed documents regarding the Water Rate Study and Wastewater Rate Study. Alison Lechowicz from Lechowicz and Tseng Municipal Consultants provided handouts of Draft Sewer Rates Increase, Draft Water Rates Increase and Water Bill Survey. Aforementioned documents were reviewed and options were evaluated by the Committee.
2. Assistant General Manager Dina Breitstein provided handouts of Policy 11- Purchasing and Procurement and Policy 15- Disposition of Surplus Property. Assistant General Manager recommends changes to both policies to reflect change in Town needs and align more closely to local municipalities.

**E. DISCUSSION ITEMS**

1. Discussion Regarding Water and Wastewater Rate Study Update.  
Alison Lechowicz from Lechowicz and Tseng Municipal Consultants presented a revised draft of previous study of Water and Wastewater rates. Graphs showed reflected a gradual phase-in of pipeline improvements resulting in a lower rate plan. Prior rate study in 2016 assumed a 12% rate increase and the new draft will be in the middle of rate increase. Three options were presented; Option 1- Maximum Debt Financing will result in approximately one percent rate increase over 30 years at 4.15% interest. Option 2- No Debt Option resulted in a 20% rate increase followed by a 15% rate increase. Option 3- Three Million in Financing resulted in the middle option, providing 5% rate increases each year over five years. There was discussion between Alison Lechowicz from Lechowicz and Tseng Municipal Consultants, Finance Manager Carter, Assistant General Manager Breitstein and Chair Robert Leete regarding the three options presented. There was also discussion about comparison with other local

communities. It was concluded that Alison Lechowicz from Lechowicz and Tseng Municipal Consultants will provide a draft report with details of Option 3 to present at the Special Finance Committee Meeting on Monday, March 9, 2020 at 2:30 p.m.

Public Comment Regarding:

- Community member is not interested in rates of other communities. Community member is more concerned with a reasonable presentation of the rate study.
2. Discussion Regarding Emergency Spending Clause in the Purchasing Policy.  
At the present moment, Policy 011- Purchasing and Procurement, allows for General Manager to provide financial judgement in the event of a Town emergency up to a maximum of \$10,000.00, request was made to increase this amount for emergency services to \$1,000,000.00. Chair Robert Leete asked for prompt notification to the Board of such an emergency. General Manager Davies indicated notification to Board will be given promptly.  
Recommendation from the Finance Committee to the Board is to review this item at the next Board meeting.
  3. Discussion Regarding Disposition of Property Surplus Policy.  
Assistant General Manager Breitstein recommended that any surplus go back to the fund it was originally removed from. In the event of a surplus, sale, auction that will gross any funds, the funds associated with that sale will go to the original department that funded it. Chair Robert Leete concurred.  
Recommendation from the Finance Committee to the Board is to review this item at the next Board meeting.

**F. FUTURE DISCUSSION/AGENDA ITEMS**

None

**G. ADJOURNMENT**

1. The meeting adjourned at 10:49 a.m. to the next Standing Finance Committee meeting at the Community Center located at 1601 Discovery Bay Boulevard.

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## MINUTES OF THE SPECIAL MEETING OF THE STANDING FINANCE COMMITTEE OF THE TOWN OF DISCOVERY BAY

Monday, March 9, 2020

2:30 p.m..

Community Center

1601 Discovery Bay Boulevard, Discovery Bay, California

Website address: [www.todb.ca.gov](http://www.todb.ca.gov)

### Finance Committee Members

Chair Robert Leete

Vice-Chair Bill Mayer

#### A. ROLL CALL

1. Call business meeting to order 2:30 p.m.- By Chair Robert Leete
2. Roll Call.- All Present

#### B. PUBLIC COMMENTS (Individual Public Comments will be limited to a 3-minute time limit)

During Public Comments, the public may address the Committee on any issue within the District's jurisdiction which is not on the Agenda. The public may comment on any item on the Agenda at the time the item is before the Committee for consideration by filling out a comment form. The public will be called to comment in the order the comment forms are received. Any person wishing to speak will have 3 minutes to make their comment. There will be no dialog between the Committee and the commenter as the law strictly limits the ability of Committee members to discuss matters not on the agenda. We ask that you refrain from personal attacks during comment, and that you address all comments to the Committee only. Any clarifying questions from the Committee must go through the Chair. Comments from the public do not necessarily reflect the view point of the Committee members.

#### C. DRAFT MINUTES TO BE APPROVED

None

#### D. PRESENTATIONS

None

#### E. DISCUSSION ITEMS

1. Presentation by Underwriters Brandis Tallman on Debt Financing. Rick Brandis and Nicki Tallman presented taxable and nontaxable financing options for Bonds. Rates were discussed for refinancing the Town's 2012 Bond with both taxable and non-taxable options. Chair Leete asked about the capacity to extend funds over a three year period. Discussion about increase amounts were discussed among Chairs. General Manager, Mike Davies recommended bring this forward to the rest of the Board members at the March 18, 2020 Board Meeting.

Public Comment Regarding:

- Expression of indifference pertaining to rates of rates of surrounding areas. Pipeline project funding was mentioned as a concern. Public requested transparency on the actual cost to borrow.

**F. FUTURE DISCUSSION/AGENDA ITEMS**

**G. ADJOURNMENT**

1. Adjourn to the next Standing Finance Committee meeting at the Community Center located at 1601 Discovery Bay Boulevard.

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DRAFT



**Town of Discovery Bay  
Community Services District  
2020 Water Rate Study  
Draft Tables – April 1, 2020**



**Notes:**

Options have been revised since the March 18 Board Meeting:

- Additional projects added (40% water/60% sewer) for the relocation of the District’s office building, District security, and vehicle and equipment purchases
- New debt assumed for FY2020/21. Debt service costs are estimated by Brandis Tallman at 4.5% over 30 years

12% rate increase approved for FY2020/21 in prior rate study.

Rate design has been adjusted based on the proposed cost allocation methodology and water conservation targets. SB 606 and AB1668 establish a current target of 55 gallons per capita indoor water use by January 1, 2025. On January 1, 2025, it will decrease to the greater of (a) a number selected by DWR or (b) 52.5 gallons per capita daily. On January 1, 2030, the limit will decrease to 50 gallons per capita daily. Enforcement mechanisms are unclear however it is anticipated that fines against water purveyors will begin in 2027. L&T reviewed various sources of water usage data from the Town. It is estimated that current indoor water use is 80 gallons per person per day. This rate study assumes that residential indoor water use will decrease to 70 gallons per person per day by 2025. It is also assumed that the Town will further evaluate its water conservation goals and implement measures to reduce indoor demand from 2025 to 2027.

**System Average Annual Rate Revenue Increases**

**(total increase to rate revenues; the rates of individual customers will vary based on changes to rate design)**

Option	FY2020/21	FY2021/22	FY2022/23	FY2023/24	FY2024/25
#1: No debt	+32%	+32%	+1%	+1%	+1%
#2: \$4M debt	+7%	+7%	+7%	+7%	+7%
#3: \$8M debt	+1.75%	+1.75%	+1.75%	+1.75%	+1.75%

**Cumulative Rate Revenue Increases**

Option	FY2020/21	FY2021/22	FY2022/23	FY2023/24	FY2024/25
#1: No debt	+32%	+74.2%	+76.0%	+77.7%	+79.5%
#2: \$4M debt	+7%	+14.5%	+22.5%	+31.1%	+40.3%
#3: \$8M debt	+1.75%	+3.53%	+5.34%	+7.19%	+9.06%

**Debt Service Coverage Ratio (combined ratio for 2012, 2017, and new debt)**

Option	FY2020/21	FY2021/22	FY2022/23	FY2023/24	FY2024/25
#1: No debt	10.98	17.32	17.17	17.06	17.20
#2: \$4M debt	6.98	4.02	4.40	4.92	5.52
#3: \$8M debt	6.15	2.10	2.01	1.98	1.97

**Table 1: Summary of Capital Funding Sources  
Town of Discovery Bay  
Water Rate Study**

	<b>OPTION 1 No Debt</b>	<b>OPTION 2 \$4M</b>	<b>OPTION 3 \$8M</b>
Revenue Sources			
Existing Capital Reserves	164,100	164,100	114,100
Excess Operating Reserves	1,000,000	1,000,000	1,000,000
Capacity Fees	407,400	407,400	407,400
Rate Revenues	12,450,000	8,450,000	4,500,000
New Debt	<u>0</u>	<u>4,000,000</u>	<u>8,000,000</u>
Total Revenues	14,021,500	14,021,500	14,021,500
Total Capital Projects	14,021,500	14,021,500	14,021,500

**Table 2: Reserves  
Town of Discovery Bay  
Water Rate Study**

<b>Reserves</b>	<b>FY2018/19</b>		
	<b>Estimate</b>	<b>Water</b>	<b>Wastewater</b>
Water & Wastewater Operating Reserves	\$5,142,601	\$755,828	\$4,386,773
Emergency Reserves	\$3,001,000	\$1,200,400	\$1,800,600
Sewer Infrastructure Replacement Fund	\$1,550,000	\$0	\$1,550,000
Pumps/Motors Replacement Fund	\$390,000	\$156,000	\$234,000
Water Infrastructure Replacement Fund	\$859,143	\$418,728	\$0
Generators Replacement Fund	\$175,000	\$70,000	\$105,000
Facilities & Vehicles Replacement Fund	\$310,852	\$117,426	\$193,426
<b>Operating Reserves Total</b>	<b>\$5,142,601</b>	<b>\$755,828</b>	<b>\$4,386,773</b>
<b>Emergency Reserves</b>	<b>\$3,001,000</b>	<b>\$1,200,400</b>	<b>\$1,800,600</b>
<b>Infrastructure Replacement Total</b>	<b>\$2,844,580</b>	<b>\$762,154</b>	<b>\$2,082,426</b>
<b>Total Reserves</b>	<b>\$10,988,181</b>	<b>\$2,718,382</b>	<b>\$8,269,799</b>

**Table 3: Proposed Water Rates and Changes – OPTION 1: No Debt  
Town of Discovery Bay  
Water Rate Study**

Monthly Use (cc)	13.0	12.8	12.6	12.4	12.2	11.9
Residential Bill (1" meter)	\$49.40	\$65.44	\$86.34	\$86.90	\$87.61	\$88.32
% increase		32%	32%	1%	1%	1%
Bill at 13 ccf, 1" meter	\$49.40	\$66.02	\$87.91	\$89.30	\$90.89	\$92.97
		34%	33%	2%	2%	2%

WATER	Current	PROPOSED				
		FY2020/21	FY2021/22	FY2022/23	FY2023/24	FY2024/25
	Monthly (\$/month)					
Vacant	\$14.67	\$14.67	\$14.67	\$14.67	\$14.67	\$14.67
Non-irrigation Account Charge:						
5/8 Inch Meter	\$20.06	\$27.91	\$36.85	\$37.22	\$37.60	\$37.98
3/4 Inch Meter	\$20.06	\$27.91	\$36.85	\$37.22	\$37.60	\$37.98
1 Inch Meter	\$20.06	\$27.91	\$36.85	\$37.22	\$37.60	\$37.98
1 1/2 Inch Meter	\$39.16	\$52.93	\$69.87	\$70.57	\$71.28	\$72.00
2 Inch Meter	\$62.04	\$82.95	\$109.50	\$110.60	\$111.71	\$112.83
3 Inch Meter	\$123.06	\$163.02	\$215.19	\$217.35	\$219.53	\$221.73
4 Inch Meter	\$191.71	\$253.09	\$334.08	\$337.43	\$340.81	\$344.22
6 Inch Meter	\$382.43	\$503.29	\$664.35	\$671.00	\$677.71	\$684.49
Irrigation Account Charge:						
5/8 Inch Meter	\$18.92	\$25.00	\$33.00	\$33.33	\$33.67	\$34.01
3/4 Inch Meter	\$18.92	\$25.00	\$33.00	\$33.33	\$33.67	\$34.01
1 Inch Meter	\$18.92	\$25.00	\$33.00	\$33.33	\$33.67	\$34.01
1 1/2 Inch Meter	\$36.87	\$47.11	\$62.19	\$62.82	\$63.45	\$64.09
2 Inch Meter	\$58.38	\$73.64	\$97.21	\$98.19	\$99.18	\$100.18
3 Inch Meter	\$115.73	\$144.39	\$190.60	\$192.51	\$194.44	\$196.39
4 Inch Meter	\$180.27	\$223.99	\$295.67	\$298.63	\$301.62	\$304.64
6 Inch Meter	\$359.54	\$445.09	\$587.52	\$593.40	\$599.34	\$605.34
Metered Usage Charge:						
All Usage (\$/ccf)	\$2.257	\$2.932	\$3.928	\$4.006	\$4.099	\$4.230
Newly Metered Customers Meter Install Fee (10-year payback)	\$8.01	\$8.01	\$8.01	\$8.01	\$8.01	\$8.01

ccf = 100 cubic feet = 748 gallons

Note: This rate plan does not designate which projects are repair and rehabilitation projects and which are expansion projects to meet the needs of new development. Capacity fee revenues can only be used to fund expansion projects and are estimated based on 34 EDUs in FY2019/20 and 10 new EDUs per year thereafter. Project costs escalated by 3% annually.

**Table 4: Water Capital Cash Flows - OPTION 1: No Debt**

	<b>FY2019/20</b>	<b>FY2020/21</b>	<b>FY2021/22</b>	<b>FY2022/23</b>	<b>FY2023/24</b>	<b>FY2024/25</b>
Emergency Reserves	1,200,400	1,200,400	1,200,400	1,200,400	1,200,400	1,200,400
Infrastructure Replacement	<u>762,000</u>	<u>749,900</u>	<u>356,800</u>	<u>2,300</u>	<u>190,400</u>	<u>588,300</u>
<b>Beginning Balance</b>	1,962,400	1,950,300	1,557,200	1,202,700	1,390,800	1,788,700
<b>Revenues</b>						
Capacity Fees (\$4,850/EDU)	164,900	48,500	48,500	48,500	48,500	48,500
Transfer from Operating	1,000,000	2,750,000	4,300,000	2,000,000	1,700,000	1,700,000
New Debt Proceeds	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
<b>Total Revenues</b>	1,164,900	2,798,500	4,348,500	2,048,500	1,748,500	1,748,500
<b>Capital Improvements</b>						
Water Supply Capacity						
Well 8	150,000	772,500	2,811,400	958,900	0	0
Well 5A Decommissioning	<u>0</u>	<u>0</u>	<u>0</u>	<u>82,000</u>	<u>0</u>	<u>0</u>
Total Water Supply Capacity	150,000	772,500	2,811,400	1,040,900	0	0
Upgrades for Existing Water Supply						
Well 4A Rehab	140,000	0	0	0	0	0
Well Rehab (Wells 1B, 2, 4A, 6)	0	257,500	0	0	225,100	0
Filter Repair (Newport & Willow)	118,000	103,000	231,300	0	0	0
Stabilization Soils- Willow Lake WTP	150,000	0	0	0	0	0
Upgrade Well 4A Piping	<u>75,000</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Existing Water Supply	483,000	360,500	231,300	0	225,100	0
Distribution/Pipeline Replacements						
Mainline CIP Program Long-Term	0	0	530,500	819,500	1,125,500	1,738,900
Cathodic Protection	0	257,500	0	0	0	0
6 inch pipeline Lakeview Biz Park	0	298,700	0	0	0	0
Replace Underwater Crossing Laguna Ct	400,000	0	0	0	0	0
Edgeview St. Andrews /Clubhouse	0	309,000	0	0	0	0
Marina Underwater Crossing	<u>0</u>	<u>600,000</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Distribution/Pipeline Replacements	400,000	1,465,200	530,500	819,500	1,125,500	1,738,900
Additional Distribution Improvements						
WTP spill containment curbing/diversion	0	25,800	0	0	0	0
Upgrade Hypo Tanks at WTP	<u>0</u>	<u>0</u>	<u>26,500</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Distribution/Pipeline Replacements	0	25,800	26,500	0	0	0
Master Plans						
Water Master & Asset Management Plans	0	257,500	0	0	0	0
2020 Urban Water Management Plan	0	41,200	0	0	0	0
AWIA Emergency Plans	<u>0</u>	<u>25,800</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Master Plans	0	324,500	0	0	0	0
Building Rehab or Relocation						
Island Building by Well 1B	60,000	0	0	0	0	0
Move District Main Office Building	<u>0</u>	<u>164,800</u>	<u>1,103,300</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Building Rehab/Relocation	60,000	164,800	1,103,300	0	0	0
Vehicle & Equipment Purchases						
New Truck	16,000	16,500	0	0	0	0
Woodchipper or Firebox	<u>20,000</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Vehicle & Equipment	36,000	16,500	0	0	0	0
District Security						
Cyber Security	0	61,800	0	0	45,000	0
Phase 1 - complete	0	0	0	0	0	0
Phase 2	48,000	0	0	0	0	0
Phase 3	<u>0</u>	<u>61,800</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total District Security	48,000	61,800	0	0	0	0
<b>Total Capital Improvements</b>	1,177,000	3,191,600	4,703,000	1,860,400	1,350,600	1,738,900
<b>Total Net Revenues</b>	(12,100)	(393,100)	(354,500)	188,100	397,900	9,600
<b>Ending Balance</b>	1,950,300	1,557,200	1,202,700	1,390,800	1,788,700	1,798,300

**Table 5: Water Operating Cash Flows – OPTION 1: No Debt**  
**Town of Discovery Bay**  
**Water Rate Study**

Line	Current FY2019/20	Projected FY2020/21	Projected FY2021/22	Projected FY2022/23	Projected FY2023/24	Projected FY2024/25	
1	<b>Beginning Operating Balance</b>	\$756,000	\$1,533,000	\$1,366,600	\$1,310,500	\$3,482,200	\$5,941,000
2							
3	<b>Proposed Increase</b>		32.0%	32.0%	1.0%	1.0%	1.0%
4							
5	<b>Revenues</b>						
6	Rate Revenue	4,191,000	5,532,000	7,302,000	7,375,000	7,449,000	7,523,000
7	New Customers	<u>20,000</u>	<u>34,600</u>	<u>55,900</u>	<u>66,700</u>	<u>77,800</u>	<u>89,000</u>
8	Rate Rev Subtotal	4,211,000	5,566,600	7,357,900	7,441,700	7,526,800	7,612,000
9	Less Delinquency (2%)	(91,000)	(111,000)	(146,000)	(148,000)	(149,000)	(150,000)
10	Vacant Parcel	12,000	12,000	12,000	12,000	12,000	12,000
11	Meter Reimbursements	336,000	336,000	336,000	336,000	336,000	336,000
12	Other & Misc	<u>22,000</u>	<u>27,000</u>	<u>27,000</u>	<u>27,000</u>	<u>27,000</u>	<u>27,000</u>
13	<b>Total Revenues</b>	4,490,000	5,830,600	7,586,900	7,668,700	7,752,800	7,837,000
14							
15	% increase in operating expenses		budget	3.0%	3.0%	3.0%	3.0%
16	<b>Expenses</b>						
17	Operating Expenses						
18	Admin & Inter Govt. & Board	334,000	451,000	465,000	479,000	493,000	508,000
19	Staffing & Consulting Serv	572,000	862,000	888,000	915,000	942,000	970,000
20	Meters Reading	88,000	93,000	96,000	99,000	102,000	105,000
21	Operations & Maint	331,000	424,000	437,000	450,000	464,000	478,000
22	SGMA Compliance	0	15,000	20,000	21,000	21,000	22,000
23	Utilities [1]	479,000	467,000	481,000	495,000	510,000	525,000
24	Service Contract [2]	<u>651,000</u>	<u>676,000</u>	<u>696,000</u>	<u>780,000</u>	<u>803,000</u>	<u>827,000</u>
25	Total Operating Expenses	2,455,000	2,988,000	3,083,000	3,239,000	3,335,000	3,435,000
26							
27	Net Operating Revenues	2,035,000	2,842,600	4,503,900	4,429,700	4,417,800	4,402,000
28							
29	Debt Service						
30	2012 Bonds Debt Service [3]	88,000	88,000	89,000	88,000	89,000	88,000
31	2017 Bonds Debt Service [3]	170,000	171,000	171,000	170,000	170,000	168,000
32	New Debt Service [4]	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
33	Total Debt Service	258,000	259,000	260,000	258,000	259,000	256,000
34							
35	Debt Service Coverage	7.89	10.98	17.32	17.17	17.06	17.20
36							
37	<b>Total O&amp;M + Debt</b>	2,713,000	3,247,000	3,343,000	3,497,000	3,594,000	3,691,000
38							
39	<b>Total Net Revenues</b>	1,777,000	2,583,600	4,243,900	4,171,700	4,158,800	4,146,000
40							
41	<b>Transfer to Capital</b>	1,000,000	2,750,000	4,300,000	2,000,000	1,700,000	1,700,000
42							
43	<b>O&amp;M Ending balance</b>	1,533,000	1,366,600	1,310,500	3,482,200	5,941,000	8,387,000
44							
45	<b>Minimum balance target [5]</b>	818,000	996,000	1,028,000	1,080,000	1,112,000	1,145,000

1 - Chemicals and electric  
2 - Assumed increase in FY2023 due to Well #8 coming online  
3 - Based on year ended December 1  
4 - Estimated by Brandis Tallman  
5 - 4 months O&M expenses

**Table 6: Proposed Water Rates and Changes – OPTION 2: \$4M**  
**Town of Discovery Bay**  
**Water Rate Study**

Monthly Use (cc)	13.0	12.8	12.6	12.4	12.2	11.9
Residential Bill (1" meter)	\$49.40	\$53.06	\$56.75	\$60.52	\$64.64	\$69.04
% increase		7%	7%	7%	7%	7%
Bill at 13 ccf, 1" meter	13.0 \$49.40	13.0 \$53.54	13.0 \$57.79	13.0 \$62.20	13.0 \$67.06	13.0 \$72.68
		8%	8%	8%	8%	8%

WATER	Current	PROPOSED				
		FY2020/21	FY2021/22	FY2022/23	FY2023/24	FY2024/25
	Monthly (\$/month)					
Vacant	\$14.67	\$14.67	\$14.67	\$14.67	\$14.67	\$14.67
Non-irrigation Account Charge:						
5/8 Inch Meter	\$20.06	\$22.61	\$24.20	\$25.90	\$27.72	\$29.67
3/4 Inch Meter	\$20.06	\$22.61	\$24.20	\$25.90	\$27.72	\$29.67
1 Inch Meter	\$20.06	\$22.61	\$24.20	\$25.90	\$27.72	\$29.67
1 1/2 Inch Meter	\$39.16	\$42.59	\$45.58	\$48.78	\$52.20	\$55.86
2 Inch Meter	\$62.04	\$66.57	\$71.23	\$76.22	\$81.56	\$87.27
3 Inch Meter	\$123.06	\$130.50	\$139.64	\$149.42	\$159.88	\$171.08
4 Inch Meter	\$191.71	\$202.43	\$216.61	\$231.78	\$248.01	\$265.38
6 Inch Meter	\$382.43	\$402.23	\$430.39	\$460.52	\$492.76	\$527.26
Irrigation Account Charge:						
5/8 Inch Meter	\$18.92	\$20.25	\$21.67	\$23.19	\$24.82	\$26.56
3/4 Inch Meter	\$18.92	\$20.25	\$21.67	\$23.19	\$24.82	\$26.56
1 Inch Meter	\$18.92	\$20.25	\$21.67	\$23.19	\$24.82	\$26.56
1 1/2 Inch Meter	\$36.87	\$39.13	\$41.53	\$44.08	\$46.79	\$49.66
2 Inch Meter	\$58.38	\$61.77	\$65.35	\$69.14	\$73.15	\$77.39
3 Inch Meter	\$115.73	\$122.10	\$128.82	\$135.91	\$143.39	\$151.28
4 Inch Meter	\$180.27	\$189.99	\$200.24	\$211.05	\$222.43	\$234.43
6 Inch Meter	\$359.54	\$378.58	\$398.64	\$419.75	\$441.99	\$465.40
Metered Usage Charge:						
All Usage (\$/ccf)	\$2.257	\$2.379	\$2.584	\$2.792	\$3.026	\$3.308
Newly Metered Customers Meter Install Fee (10-year payback)	\$8.01	\$8.01	\$8.01	\$8.01	\$8.01	\$8.01

ccf = 100 cubic feet = 748 gallons

Note: This rate plan does not designate which projects are repair and rehabilitation projects and which are expansion projects to meet the needs of new development. Capacity fee revenues can only be used to fund expansion projects and are estimated based on 34 EDUs in FY2019/20 and 10 new EDUs per year thereafter. Project costs escalated by 3% annually.

**Table 7: Water Capital Cash Flows - OPTION 2: \$4M**

	<b>FY2019/20</b>	<b>FY2020/21</b>	<b>FY2021/22</b>	<b>FY2022/23</b>	<b>FY2023/24</b>	<b>FY2024/25</b>
Emergency Reserves	1,200,400	1,200,400	1,200,400	1,200,400	1,200,400	1,200,400
Infrastructure Replacement	<u>762,000</u>	<u>749,900</u>	<u>3,106,800</u>	<u>2,300</u>	<u>190,400</u>	<u>588,300</u>
<b>Beginning Balance</b>	1,962,400	1,950,300	4,307,200	1,202,700	1,390,800	1,788,700
<b>Revenues</b>						
Capacity Fees (\$4,850/EDU)	164,900	48,500	48,500	48,500	48,500	48,500
Transfer from Operating	1,000,000	1,500,000	1,550,000	2,000,000	1,700,000	1,700,000
New Debt Proceeds	<u>0</u>	<u>4,000,000</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
<b>Total Revenues</b>	1,164,900	5,548,500	1,598,500	2,048,500	1,748,500	1,748,500
<b>Capital Improvements</b>						
<b>Water Supply Capacity</b>						
Well 8	150,000	772,500	2,811,400	958,900	0	0
Well 5A Decommissioning	<u>0</u>	<u>0</u>	<u>0</u>	<u>82,000</u>	<u>0</u>	<u>0</u>
Total Water Supply Capacity	150,000	772,500	2,811,400	1,040,900	0	0
<b>Upgrades for Existing Water Supply</b>						
Well 4A Rehab	140,000	0	0	0	0	0
Well Rehab (Wells 1B, 2, 4A, 6)	0	257,500	0	0	225,100	0
Filter Repair (Newport & Willow)	118,000	103,000	231,300	0	0	0
Stabilization Soils- Willow Lake WTP	150,000	0	0	0	0	0
Upgrade Well 4A Piping	<u>75,000</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Existing Water Supply	483,000	360,500	231,300	0	225,100	0
<b>Distribution/Pipeline Replacements</b>						
Mainline CIP Program Long-Term	0	0	530,500	819,500	1,125,500	1,738,900
Cathodic Protection	0	257,500	0	0	0	0
6 inch pipeline Lakeview Biz Park	0	298,700	0	0	0	0
Replace Underwater Crossing Laguna Ct	400,000	0	0	0	0	0
Edgeview St. Andrews /Clubhouse	0	309,000	0	0	0	0
Marina Underwater Crossing	<u>0</u>	<u>600,000</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Distribution/Pipeline Replacements	400,000	1,465,200	530,500	819,500	1,125,500	1,738,900
<b>Additional Distribution Improvements</b>						
WTP spill containment curbing/diversion	0	25,800	0	0	0	0
Upgrade Hypo Tanks at WTP	<u>0</u>	<u>0</u>	<u>26,500</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Distribution/Pipeline Replacements	0	25,800	26,500	0	0	0
<b>Master Plans</b>						
Water Master & Asset Management Plans	0	257,500	0	0	0	0
2020 Urban Water Management Plan	0	41,200	0	0	0	0
AWIA Emergency Plans	<u>0</u>	<u>25,800</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Master Plans	0	324,500	0	0	0	0
<b>Building Rehab or Relocation</b>						
Island Building by Well 1B	60,000	0	0	0	0	0
Move District Main Office Building	<u>0</u>	<u>164,800</u>	<u>1,103,300</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Building Rehab/Relocation	60,000	164,800	1,103,300	0	0	0
<b>Vehicle &amp; Equipment Purchases</b>						
New Truck	16,000	16,500	0	0	0	0
Woodchipper or Firebox	<u>20,000</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Vehicle & Equipment	36,000	16,500	0	0	0	0
<b>District Security</b>						
Cyber Security	0	61,800	0	0	45,000	0
Phase 1 - complete	0	0	0	0	0	0
Phase 2	48,000	0	0	0	0	0
Phase 3	<u>0</u>	<u>61,800</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total District Security	48,000	61,800	0	0	0	0
<b>Total Capital Improvements</b>	1,177,000	3,191,600	4,703,000	1,860,400	1,350,600	1,738,900
<b>Total Net Revenues</b>	(12,100)	2,356,900	(3,104,500)	188,100	397,900	9,600
<b>Ending Balance</b>	1,950,300	4,307,200	1,202,700	1,390,800	1,788,700	1,798,300

**Table 8: Water Operating Cash Flows – OPTION 2: \$4M**  
**Town of Discovery Bay**  
**Water Rate Study**

Line	Current FY2019/20	Projected FY2020/21	Projected FY2021/22	Projected FY2022/23	Projected FY2023/24	Projected FY2024/25	
1	<b>Beginning Operating Balance</b>	\$756,000	\$1,533,000	\$1,583,000	\$1,558,200	\$1,268,100	\$1,543,900
2							
3	<b>Proposed Increase</b>		7.00%	7.00%	7.00%	7.00%	7.00%
4							
5	<b>Revenues</b>						
6	Rate Revenue	4,191,000	4,484,000	4,798,000	5,134,000	5,493,000	5,878,000
7	New Customers	<u>20,000</u>	<u>28,000</u>	<u>36,800</u>	<u>46,500</u>	<u>57,400</u>	<u>69,600</u>
8	Rate Rev Subtotal	4,211,000	4,512,000	4,834,800	5,180,500	5,550,400	5,947,600
9	Less Delinquency (2%)	(91,000)	(90,000)	(96,000)	(103,000)	(110,000)	(118,000)
10	Vacant Parcel	12,000	12,000	12,000	12,000	12,000	12,000
11	Meter Reimbursements	336,000	336,000	336,000	336,000	336,000	336,000
12	Other & Misc	<u>22,000</u>	<u>27,000</u>	<u>27,000</u>	<u>27,000</u>	<u>27,000</u>	<u>27,000</u>
13	<b>Total Revenues</b>	4,490,000	4,797,000	5,113,800	5,452,500	5,815,400	6,204,600
14							
15	% increase in operating expenses		budget	3.0%	3.0%	3.0%	3.0%
16	<b>Expenses</b>						
17	Operating Expenses						
18	Admin & Inter Govt. & Board	334,000	451,000	465,000	479,000	493,000	508,000
19	Staffing & Consulting Serv	572,000	862,000	888,000	915,000	942,000	970,000
20	Meters Reading	88,000	93,000	96,000	99,000	102,000	105,000
21	Operations & Maint	331,000	424,000	437,000	450,000	464,000	478,000
22	SGMA Compliance	0	15,000	20,000	21,000	21,000	22,000
23	Utilities [1]	479,000	467,000	481,000	495,000	510,000	525,000
24	Service Contract [2]	<u>651,000</u>	<u>676,000</u>	<u>696,000</u>	<u>780,000</u>	<u>803,000</u>	<u>827,000</u>
25	Total Operating Expenses	2,455,000	2,988,000	3,083,000	3,239,000	3,335,000	3,435,000
26							
27	Net Operating Revenues	2,035,000	1,809,000	2,030,800	2,213,500	2,480,400	2,769,600
28							
29	Debt Service						
30	2012 Bonds Debt Service [3]	88,000	88,000	89,000	88,000	89,000	88,000
31	2017 Bonds Debt Service [3]	170,000	171,000	171,000	170,000	170,000	168,000
32	New Debt Service [4]	<u>0</u>	<u>0</u>	<u>245,600</u>	<u>245,600</u>	<u>245,600</u>	<u>245,600</u>
33	Total Debt Service	258,000	259,000	505,600	503,600	504,600	501,600
34							
35	Debt Service Coverage	7.89	6.98	4.02	4.40	4.92	5.52
36							
37	<b>Total O&amp;M + Debt</b>	2,713,000	3,247,000	3,588,600	3,742,600	3,839,600	3,936,600
38							
39	<b>Total Net Revenues</b>	1,777,000	1,550,000	1,525,200	1,709,900	1,975,800	2,268,000
40							
41	<b>Transfer to Capital</b>	1,000,000	1,500,000	1,550,000	2,000,000	1,700,000	1,700,000
42							
43	<b>O&amp;M Ending balance</b>	1,533,000	1,583,000	1,558,200	1,268,100	1,543,900	2,111,900
44							
45	<b>Minimum balance target [5]</b>	818,000	996,000	1,028,000	1,080,000	1,112,000	1,145,000

1 - Chemicals and electric

2 - Assumed increase in FY2023 due to Well #8 coming online

3 - Based on year ended December 1

4 - Estimated by Brandis Tallman based on 30 years at 4.5%

5 - 4 months O&M expenses

**Table 9: Proposed Water Rates and Changes – OPTION 3: \$8M**  
**Town of Discovery Bay**  
**Water Rate Study**

Monthly Use (cc)	13.0	12.8	12.6	12.4	12.2	11.9
Residential Bill (1" meter)	\$49.40	\$50.47	\$51.32	\$52.05	\$52.86	\$53.68
% increase		2%	2%	1%	2%	2%
Bill at 13 ccf, 1" meter	13.0	13.0	13.0	13.0	13.0	13.0
	\$49.40	\$50.92	\$52.26	\$53.49	\$54.84	\$56.52
		3%	3%	2%	3%	3%

WATER	Current	PROPOSED				
		FY2020/21	FY2021/22	FY2022/23	FY2023/24	FY2024/25
	Monthly (\$/month)					
Vacant	\$14.67	\$14.67	\$14.67	\$14.67	\$14.67	\$14.67
Non-irrigation Account Charge:						
5/8 Inch Meter	\$20.06	\$21.46	\$21.84	\$22.23	\$22.62	\$23.02
3/4 Inch Meter	\$20.06	\$21.46	\$21.84	\$22.23	\$22.62	\$23.02
1 Inch Meter	\$20.06	\$21.46	\$21.84	\$22.23	\$22.62	\$23.02
1 1/2 Inch Meter	\$39.16	\$40.08	\$40.79	\$41.51	\$42.24	\$42.98
2 Inch Meter	\$62.04	\$62.42	\$63.52	\$64.64	\$65.78	\$66.94
3 Inch Meter	\$123.06	\$122.01	\$124.15	\$126.33	\$128.54	\$130.80
4 Inch Meter	\$191.71	\$189.04	\$192.35	\$195.72	\$199.15	\$202.64
6 Inch Meter	\$382.43	\$375.24	\$381.81	\$388.50	\$395.30	\$402.22
Irrigation Account Charge:						
5/8 Inch Meter	\$18.92	\$19.25	\$19.58	\$19.92	\$20.27	\$20.62
3/4 Inch Meter	\$18.92	\$19.25	\$19.58	\$19.92	\$20.27	\$20.62
1 Inch Meter	\$18.92	\$19.25	\$19.58	\$19.92	\$20.27	\$20.62
1 1/2 Inch Meter	\$36.87	\$37.13	\$37.39	\$37.65	\$37.91	\$38.18
2 Inch Meter	\$58.38	\$58.55	\$58.73	\$58.90	\$59.07	\$59.25
3 Inch Meter	\$115.73	\$115.73	\$115.73	\$115.73	\$115.73	\$115.73
4 Inch Meter	\$180.27	\$180.27	\$180.27	\$180.27	\$180.27	\$180.27
6 Inch Meter	\$359.54	\$359.54	\$359.54	\$359.54	\$359.54	\$359.54
Metered Usage Charge:						
All Usage (\$/ccf)	\$2.257	\$2.266	\$2.340	\$2.405	\$2.479	\$2.577
Newly Metered Customers Meter Install Fee (10-year payback)	\$8.01	\$8.01	\$8.01	\$8.01	\$8.01	\$8.01

ccf = 100 cubic feet = 748 gallons

Note: This rate plan does not designate which projects are repair and rehabilitation projects and which are expansion projects to meet the needs of new development. Capacity fee revenues can only be used to fund expansion projects and are estimated based on 34 EDUs in FY2019/20 and 10 new EDUs per year thereafter. Project costs escalated by 3% annually.

**Table 10: Water Capital Cash Flows - OPTION 3: 8M**

	<b>FY2019/20</b>	<b>FY2020/21</b>	<b>FY2021/22</b>	<b>FY2022/23</b>	<b>FY2023/24</b>	<b>FY2024/25</b>
Emergency Reserves	1,200,400	1,200,400	1,200,400	1,200,400	1,200,400	1,200,400
Infrastructure Replacement	<u>762,000</u>	<u>749,900</u>	<u>6,106,800</u>	<u>2,452,300</u>	<u>1,640,400</u>	<u>1,338,300</u>
<b>Beginning Balance</b>	1,962,400	1,950,300	7,307,200	3,652,700	2,840,800	2,538,700
<b>Revenues</b>						
Capacity Fees (\$4,850/EDU)	164,900	48,500	48,500	48,500	48,500	48,500
Transfer from Operating	1,000,000	500,000	1,000,000	1,000,000	1,000,000	1,000,000
New Debt Proceeds	<u>0</u>	<u>8,000,000</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
<b>Total Revenues</b>	1,164,900	8,548,500	1,048,500	1,048,500	1,048,500	1,048,500
<b>Capital Improvements</b>						
<b>Water Supply Capacity</b>						
Well 8	150,000	772,500	2,811,400	958,900	0	0
Well 5A Decommissioning	<u>0</u>	<u>0</u>	<u>0</u>	<u>82,000</u>	<u>0</u>	<u>0</u>
Total Water Supply Capacity	150,000	772,500	2,811,400	1,040,900	0	0
<b>Upgrades for Existing Water Supply</b>						
Well 4A Rehab	140,000	0	0	0	0	0
Well Rehab (Wells 1B, 2, 4A, 6)	0	257,500	0	0	225,100	0
Filter Repair (Newport & Willow)	118,000	103,000	231,300	0	0	0
Stabilization Soils- Willow Lake WTP	150,000	0	0	0	0	0
Upgrade Well 4A Piping	<u>75,000</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Existing Water Supply	483,000	360,500	231,300	0	225,100	0
<b>Distribution/Pipeline Replacements</b>						
Mainline CIP Program Long-Term	0	0	530,500	819,500	1,125,500	1,738,900
Cathodic Protection	0	257,500	0	0	0	0
6 inch pipeline Lakeview Biz Park	0	298,700	0	0	0	0
Replace Underwater Crossing Laguna Ct	400,000	0	0	0	0	0
Edgeview St. Andrews /Clubhouse	0	309,000	0	0	0	0
Marina Underwater Crossing	<u>0</u>	<u>600,000</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Distribution/Pipeline Replacements	400,000	1,465,200	530,500	819,500	1,125,500	1,738,900
<b>Additional Distribution Improvements</b>						
WTP spill containment curbing/diversion	0	25,800	0	0	0	0
Upgrade Hypo Tanks at WTP	<u>0</u>	<u>0</u>	<u>26,500</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Distribution/Pipeline Replacements	0	25,800	26,500	0	0	0
<b>Master Plans</b>						
Water Master & Asset Management Plans	0	257,500	0	0	0	0
2020 Urban Water Management Plan	0	41,200	0	0	0	0
AWIA Emergency Plans	<u>0</u>	<u>25,800</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Master Plans	0	324,500	0	0	0	0
<b>Building Rehab or Relocation</b>						
Island Building by Well 1B	60,000	0	0	0	0	0
Move District Main Office Building	<u>0</u>	<u>164,800</u>	<u>1,103,300</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Building Rehab/Relocation	60,000	164,800	1,103,300	0	0	0
<b>Vehicle &amp; Equipment Purchases</b>						
New Truck	16,000	16,500	0	0	0	0
Woodchipper or Firebox	<u>20,000</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Vehicle & Equipment	36,000	16,500	0	0	0	0
<b>District Security</b>						
Cyber Security	0	61,800	0	0	45,000	0
Phase 1- complete	0	0	0	0	0	0
Phase 2	48,000	0	0	0	0	0
Phase 3	<u>0</u>	<u>61,800</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total District Security	48,000	61,800	0	0	0	0
<b>Total Capital Improvements</b>	1,177,000	3,191,600	4,703,000	1,860,400	1,350,600	1,738,900
<b>Total Net Revenues</b>	(12,100)	5,356,900	(3,654,500)	(811,900)	(302,100)	(690,400)
<b>Ending Balance</b>	1,950,300	7,307,200	3,652,700	2,840,800	2,538,700	1,848,300

**Table 11: Water Operating Cash Flows – OPTION 3: \$8M**  
**Town of Discovery Bay**  
**Water Rate Study**

Line	Current FY2019/20	Projected FY2020/21	Projected FY2021/22	Projected FY2022/23	Projected FY2023/24	Projected FY2024/25
1 <b>Beginning Operating Balance</b>	\$756,000	\$1,533,000	\$2,366,600	\$2,192,800	\$1,946,700	\$1,685,500
2						
3 <b>Proposed Increase</b>		1.75%	1.75%	1.75%	1.75%	1.75%
4						
5 <b>Revenues</b>						
6 Rate Revenue	4,191,000	4,264,000	4,339,000	4,415,000	4,492,000	4,571,000
7 New Customers	<u>20,000</u>	<u>26,600</u>	<u>33,300</u>	<u>40,000</u>	<u>46,900</u>	<u>54,100</u>
8 Rate Rev Subtotal	4,211,000	4,290,600	4,372,300	4,455,000	4,538,900	4,625,100
9 Less Delinquency (2%)	(91,000)	(85,000)	(87,000)	(88,000)	(90,000)	(91,000)
10 Vacant Parcel	12,000	12,000	12,000	12,000	12,000	12,000
11 Meter Reimbursements	336,000	336,000	336,000	336,000	336,000	336,000
12 Other & Misc	<u>22,000</u>	<u>27,000</u>	<u>27,000</u>	<u>27,000</u>	<u>27,000</u>	<u>27,000</u>
13 <b>Total Revenues</b>	4,490,000	4,580,600	4,660,300	4,742,000	4,823,900	4,909,100
14						
15 % increase in operating expenses		budget	3.0%	3.0%	3.0%	3.0%
16 <b>Expenses</b>						
17 Operating Expenses						
18 Admin & Inter Govt. & Board	334,000	451,000	465,000	479,000	493,000	508,000
19 Staffing & Consulting Serv	572,000	862,000	888,000	915,000	942,000	970,000
20 Meters Reading	88,000	93,000	96,000	99,000	102,000	105,000
21 Operations & Maint	331,000	424,000	437,000	450,000	464,000	478,000
22 SGMA Compliance	0	15,000	20,000	21,000	21,000	22,000
23 Utilities [1]	479,000	467,000	481,000	495,000	510,000	525,000
24 Service Contract [2]	<u>651,000</u>	<u>676,000</u>	<u>696,000</u>	<u>780,000</u>	<u>803,000</u>	<u>827,000</u>
25 Total Operating Expenses	2,455,000	2,988,000	3,083,000	3,239,000	3,335,000	3,435,000
26						
27 Net Operating Revenues	2,035,000	1,592,600	1,577,300	1,503,000	1,488,900	1,474,100
28						
29 Debt Service						
30 2012 Bonds Debt Service [3]	88,000	88,000	89,000	88,000	89,000	88,000
31 2017 Bonds Debt Service [3]	170,000	171,000	171,000	170,000	170,000	168,000
32 New Debt Service [4]	<u>0</u>	<u>0</u>	<u>491,100</u>	<u>491,100</u>	<u>491,100</u>	<u>491,100</u>
33 Total Debt Service	258,000	259,000	751,100	749,100	750,100	747,100
34						
35 Debt Service Coverage	7.89	6.15	2.10	2.01	1.98	1.97
36						
37 <b>Total O&amp;M + Debt</b>	2,713,000	3,247,000	3,834,100	3,988,100	4,085,100	4,182,100
38						
39 <b>Total Net Revenues</b>	1,777,000	1,333,600	826,200	753,900	738,800	727,000
40						
41 <b>Transfer to Capital</b>	1,000,000	500,000	1,000,000	1,000,000	1,000,000	1,000,000
42						
43 <b>O&amp;M Ending balance</b>	1,533,000	2,366,600	2,192,800	1,946,700	1,685,500	1,412,500
44						
45 <b>Minimum balance target [5]</b>	818,000	996,000	1,028,000	1,080,000	1,112,000	1,145,000

1 - Chemicals and electric

2 - Assumed increase in FY2023 due to Well #8 coming online

3 - Based on year ended December 1

4 - Estimated by Brandis Tallman based on 30 years at 4.5%

5 - 4 months O&M expenses



# Town of Discovery Bay Community Services District 2020 Sewer Rate Study Draft Tables – April 1, 2020



**Notes:**

Options have been revised since the March 18 Board Meeting:

- Additional projects added (40% water/60% sewer) for the relocation of the District’s office building, District security, and vehicle and equipment purchases
- New debt assumed for FY2020/21. Debt service costs are estimated by Brandis Tallman at 4.5% over 30 years
- Changes to debt and capital projects slightly updated/changed the cost allocation results

4% rate increase approved for FY2020/21 in prior rate study.

Rate design for residential and commercial customers has been adjusted. The prior studies assumed each single family home was discharging 14.4 ccf/month and each multifamily dwelling was discharging 11 ccf/month. Recent flow data at the wastewater treatment plant indicates that the average single family home (2.74 people) discharges 9 ccf/month. The average multifamily home is assumed to have 2 people and is assumed to discharge 6.5 ccf/month. The impact of this change is that single family customers have lower cost responsibility than previously assumed. All customers are proposed to receive rate increases under the options shown here but non-single family residential customers are proposed to receive larger % increases.

**System Average Annual Rate Revenue Increases**

**(total increase to rate revenues; the rates of individual customers will vary based on changes to rate design)**

Option	FY2020/21	FY2021/22	FY2022/23	FY2023/24	FY2024/25
#1: No debt	+18%	+18%	+7%	+2%	+2%
#2: \$5M debt	+5%	+5%	+5%	+1%	+1%
#3: \$7.5M debt	+1.8%	+1.8%	+1.8%	+1.8%	+1.8%
#4: \$10M debt	+1.5%	+1.5%	+1.5%	+1.5%	+1.5%

**Cumulative Rate Revenue Increases**

Option	FY2020/21	FY2021/22	FY2022/23	FY2023/24	FY2024/25
#1: No debt	+18%	+39.2%	+49.0%	+52.0%	+55.0%
#2: \$5M debt	+5.0%	+10.3%	+15.8%	+16.9%	+18.1%
#3: \$7.5M debt	+1.8%	+3.6%	+5.5%	+7.4%	+9.3%
#4: \$10M debt	+1.5%	+3.0%	+4.6%	+6.1%	+7.7%

**Debt Service Coverage Ratio (combined ratio for 2012, 2017, and new debt)**

Option	FY2020/21	FY2021/22	FY2022/23	FY2023/24	FY2024/25
#1: No debt	3.22	4.33	4.81	4.92	5.05
#2: \$5M debt	2.51	2.15	2.34	2.35	2.35
#3: \$7.5M debt	2.34	1.69	1.72	1.75	1.78
#4: \$10M debt	2.33	1.52	1.54	1.55	1.56

**Table 1: Summary of Capital Funding Sources  
Town of Discovery Bay  
Wastewater Rate Study**

	<b>OPTION 1 No Debt</b>	<b>OPTION 2 \$5M</b>	<b>OPTION 3 \$7.5M</b>	<b>OPTION 4 \$10M</b>
<b>Revenue Sources</b>				
Existing Capital Reserves	\$271,800	\$271,800	\$271,800	\$121,800
Excess Operating Reserves	\$3,500,000	\$3,500,000	\$3,500,000	\$3,500,000
Capacity Fees	\$769,900	\$769,900	\$769,900	\$769,900
Rate Revenues	\$15,050,000	\$10,050,000	\$7,550,000	\$5,200,000
New Debt	<u>\$0</u>	<u>\$5,000,000</u>	<u>\$7,500,000</u>	<u>\$10,000,000</u>
<b>Total Revenues</b>	<b>\$19,591,700</b>	<b>\$19,591,700</b>	<b>\$19,591,700</b>	<b>\$19,591,700</b>
<b>Total Capital Projects</b>	<b>\$19,591,700</b>	<b>\$19,591,700</b>	<b>\$19,591,700</b>	<b>\$19,591,700</b>

**Table 2: Reserves  
Town of Discovery Bay  
Wastewater Rate Study**

<b>Reserves</b>	<b>FY2018/19 Estimate</b>	<b>Water</b>	<b>Wastewater</b>
Water & Wastewater Operating Reserves	\$5,142,601	\$755,828	\$4,386,773
Emergency Reserves	\$3,001,000	\$1,200,400	\$1,800,600
Sewer Infrastructure Replacement Fund	\$1,550,000	\$0	\$1,550,000
Pumps/Motors Replacement Fund	\$390,000	\$156,000	\$234,000
Water Infrastructure Replacement Fund	\$859,143	\$418,728	\$0
Generators Replacement Fund	\$175,000	\$70,000	\$105,000
Facilities & Vehicles Replacement Fund	\$310,852	\$117,426	\$193,426
<b>Operating Reserves Total</b>	<b>\$5,142,601</b>	<b>\$755,828</b>	<b>\$4,386,773</b>
<b>Emergency Reserves</b>	<b>\$3,001,000</b>	<b>\$1,200,400</b>	<b>\$1,800,600</b>
<b>Infrastructure Replacement Total</b>	<b>\$2,844,580</b>	<b>\$762,154</b>	<b>\$2,082,426</b>
<b>Total Reserves</b>	<b>\$10,988,181</b>	<b>\$2,718,382</b>	<b>\$8,269,799</b>

**Table 3: Proposed Wastewater Rates and Charges - OPTION 1: No Debt**  
**Town of Discovery Bay**  
**Wastewater Rate Study**

WASTEWATER	Proposed FY 2019/20		Proposed FY 2020/21		Proposed FY 2021/22		Proposed FY 2022/23		Proposed FY 2023/24		Proposed FY 2024/25	
	Monthly (\$/month)	Yearly (\$/year)										
<b>Residential Unmetered</b>												
Single Family - Each DU	\$82.55	\$990.63	\$96.73	\$1,160.76	\$114.15	\$1,369.80	\$122.14	\$1,465.68	\$124.58	\$1,494.96	\$127.07	\$1,524.84
Multiple Family/Condos - Each DU	\$61.92	\$743.03	\$73.06	\$876.78	\$86.22	\$1,034.59	\$91.21	\$1,094.51	\$96.49	\$1,157.90	\$102.08	\$1,224.96
Vacant	\$18.67	\$224.00	\$18.67	\$224.00	\$18.67	\$224.00	\$18.67	\$224.00	\$18.67	\$224.00	\$18.67	\$224.00
<b>Nonresidential Metered</b>	Use (\$/ccf)											
Business/Government/Clubs	\$5.734		\$6.766		\$7.984		\$8.965		\$10.066		\$11.303	
Restaurants/Bars/Dining Facilities	\$16.793		\$19.816		\$23.383		\$25.495		\$27.799		\$30.310	
Schools	\$5.161		\$6.090		\$7.186		\$8.103		\$9.138		\$10.304	
Other Domestic Strength Users	\$5.734		\$6.766		\$7.984		\$8.965		\$10.066		\$11.303	

DU = Dwelling Unit  
ccf = 100 cubic feet = 748 gallons

WASTEWATER	Proposed FY 2019/20		Proposed FY 2020/21		Proposed FY 2021/22		Proposed FY 2022/23		Proposed FY 2023/24		Proposed FY 2024/25	
	Monthly (\$/month)	Yearly (\$/year)										
<b>Residential Unmetered</b>												
Single Family - Each DU			17%	17%	18%	18%	7%	7%	2%	2%	2%	2%
Multiple Family/Condos - Each DU			18%	18%	18%	18%	6%	6%	6%	6%	6%	6%
Vacant			0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
<b>Nonresidential Metered</b>			Use (\$/ccf)									
Business/Government/Clubs			18%		18%		12%		12%		12%	
Restaurants/Bars/Dining Facilities			18%		18%		9%		9%		9%	
Schools			18%		18%		13%		13%		13%	
Other Domestic Strength Users			18%		18%		12%		12%		12%	

DU = Dwelling Unit  
ccf = 100 cubic feet = 748 gallons

Note: This rate plan does not designate which projects are repair and rehabilitation projects and which are expansion projects to meet the needs of new development. Capacity fee revenues can only be used to fund expansion projects and are estimated based on 34 EDUs in FY2019/20 and 10 new EDUs per year thereafter. Project costs escalated by 3% annually.

**Table 4: Wastewater Capital Cash Flows - OPTION 1: No Debt**

	Current FY2019/20	Projected FY2020/21	Projected FY2021/22	Projected FY2022/23	Projected FY2023/24	Projected FY2024/25
Emergency Reserves	1,800,600	1,800,600	1,800,600	1,800,600	1,800,600	1,800,600
Infrastructure Replacement	<u>2,082,400</u>	<u>4,314,300</u>	<u>7,080,800</u>	<u>958,200</u>	<u>26,200</u>	<u>609,900</u>
<b>Beginning Balance</b>	3,883,000	6,114,900	8,881,400	2,758,800	1,826,800	2,410,500
<b>Revenues</b>						
Capacity Fees (\$12,030/EDU)	168,400	120,300	120,300	120,300	120,300	120,300
Transfer from Operating	3,500,000	4,000,000	4,000,000	4,050,000	1,500,000	1,500,000
New Debt Proceeds	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
<b>Total Revenues</b>	3,668,400	4,120,300	4,120,300	4,170,300	1,620,300	1,620,300
<b>Capital Improvements</b>						
WWTP Plant 1 Refurbishment	192,100	183,500	3,707,500	390,200	0	0
Denitrification	383,400	440,000	4,265,100	4,466,200	0	0
<b>Lift Stations</b>						
Lift Stations J, S, H	0	154,500	0	0	0	0
Lift Stations A, C, D, E	<u>0</u>	<u>0</u>	<u>212,200</u>	<u>0</u>	<u>0</u>	<u>0</u>
<b>Total Lift Stations</b>	0	154,500	212,200	0	0	0
<b>Clarifier Rehab</b>						
Plant 2 Clarifier #3 Rehabilitation	5,000	5,200	148,500	0	0	0
Clarifier 1 & 2 RAS Pump and Check Valves	0	0	0	0	336,500	0
Clarifier #4 Repair (cement)	<u>0</u>	<u>0</u>	<u>10,600</u>	<u>0</u>	<u>0</u>	<u>0</u>
<b>Total Clarifier Rehab</b>	5,000	5,200	159,100	0	336,500	0
<b>Additional Projects and Maintenance</b>						
Plant 2 RAS & WAS Pumping System	25,000	0	0	0	148,600	0
Replace Lagoon Dredge & Conduits	0	113,300	0	0	0	0
CCTV Van (portable and push camera)	70,000	0	0	0	0	0
Install Screen Headworks at Plant #2	25,000	0	0	245,900	0	0
Minor Rehab to Piping at Plant #1	20,000	0	244,000	0	0	0
Outfall Diffuser Repairs	<u>500,000</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
<b>Total Additional Projects and Maintenance</b>	640,000	113,300	244,000	245,900	148,600	0
<b>Other Master Plan Projects</b>						
Emergency Storage Drain to Pump Sta. W	0	0	0	0	0	86,900
Solids Handling Improvements	0	0	0	0	0	208,700
WAS Pumps and Check Valves Replacement	0	0	0	0	0	124,000
Collection System Pump Stations	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>202,600</u>	<u>0</u>
<b>Total Other Master Plan Projects</b>	0	0	0	0	202,600	419,600
Mainline Piping Replacement	0	0	0	0	281,400	0
<b>Building Rehab or Relocation</b>						
Island Building by Well 1B	90,000	0	0	0	0	0
Move District Main Office Building	<u>0</u>	<u>247,200</u>	<u>1,655,000</u>	<u>0</u>	<u>0</u>	<u>0</u>
<b>Total Relocation</b>	90,000	247,200	1,655,000	0	0	0
<b>Vehicle &amp; Equipment Purchases</b>						
New Truck	24,000	24,700	0	0	0	0
Woodchipper or Firebox	<u>30,000</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
<b>Total Vehicle &amp; Equipment</b>	54,000	24,700	0	0	0	0
<b>District Security</b>						
Cyber Security	0	92,700	0	0	67,500	0
Phase 1	0	0	0	0	0	0
Phase 2	72,000	0	0	0	0	0
Phase 3	<u>0</u>	<u>92,700</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
<b>Total District Security</b>	72,000	185,400	0	0	67,500	0
<b>Total Capital Improvements</b>	1,436,500	1,353,800	10,242,900	5,102,300	1,036,600	419,600
<b>Total Net Revenues</b>	2,231,900	2,766,500	(6,122,600)	(932,000)	583,700	1,200,700
<b>Ending Balance</b>	6,114,900	8,881,400	2,758,800	1,826,800	2,410,500	3,611,200

**Table 5: Wastewater Operating Cash Flows – OPTION 1: No Debt  
Town of Discovery Bay  
Wastewater Rate Study**

	<b>Current FY2019/20</b>	<b>Projected FY2020/21</b>	<b>Projected FY2021/22</b>	<b>Projected FY2022/23</b>	<b>Projected FY2023/24</b>	<b>Projected FY2024/25</b>
<b>Beginning balance</b>	\$4,387,000	\$3,326,400	\$1,763,600	\$1,424,400	\$1,555,000	\$4,368,200
Rate Increase		18.00%	18.00%	7.00%	2.00%	2.00%
<b>Revenues</b>						
Wastewater service						
Zone 9 Reimbursement	243,000	243,000	243,000	243,000	243,000	243,000
Other & Misc	17,300	17,300	17,300	17,300	17,300	17,300
Property Taxes (unmetered)	6,021,200	7,105,000	8,383,900	8,970,800	9,150,200	9,333,200
New Customers	0	(47,000)	(55,000)	(56,000)	(30,000)	(3,000)
Vacant	13,900	27,900	46,600	64,500	80,700	97,600
Metered sewer flow	<u>17,000</u>	<u>17,000</u>	<u>17,000</u>	<u>17,000</u>	<u>17,000</u>	<u>17,000</u>
<b>Total revenues</b>	6,312,400	7,363,200	8,652,800	9,256,600	9,478,200	9,705,100
% increase in expenses			3.0%	3.0%	3.0%	3.0%
<b>Expenses</b>						
Operating Expenses						
Admin & Inter Govt. & Board	332,000	450,000	450,000	464,000	478,000	492,000
Staffing & Consulting Serv	593,000	1,090,000	1,090,000	1,090,000	1,090,000	1,090,000
Operations & Maint	334,000	538,000	554,000	571,000	588,000	606,000
Utilities	536,000	673,000	693,000	714,000	735,000	757,000
Service Contract	<u>977,000</u>	<u>1,075,000</u>	<u>1,107,000</u>	<u>1,140,000</u>	<u>1,175,000</u>	<u>1,210,000</u>
Total Operating Expenses	2,772,000	3,826,000	3,894,000	3,979,000	4,066,000	4,155,000
Net Operating Revenues	3,540,400	3,537,200	4,758,800	5,277,600	5,412,200	5,550,100
Debt Service [1]						
2012 Bonds Debt Service	741,000	743,000	744,000	740,000	745,000	743,000
2017 Bonds Debt Service	360,000	357,000	354,000	357,000	354,000	355,000
New Debt [2]	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Debt Service	1,101,000	1,100,000	1,098,000	1,097,000	1,099,000	1,098,000
Debt Service Coverage	3.22	3.22	4.33	4.81	4.92	5.05
<b>Total Expenses</b>	3,873,000	4,926,000	4,992,000	5,076,000	5,165,000	5,253,000
<b>Net Revenues</b>	2,439,400	2,437,200	3,660,800	4,180,600	4,313,200	4,452,100
<b>Transfer to Capital Fund</b>	3,500,000	4,000,000	4,000,000	4,050,000	1,500,000	1,500,000
<b>O&amp;M Ending balance</b>	3,326,400	1,763,600	1,424,400	1,555,000	4,368,200	7,320,300
<b>O&amp;M Minimum balance target [3]</b>	924,000	1,275,000	1,298,000	1,326,000	1,355,000	1,385,000

1 - Based on year ended December 1

2 - Estimated by Brandis Tallman at 4.5% over 30 years

3 - 4 months O&M expenses

**Table 6: Proposed Wastewater Rates and Charges - OPTION 2: \$5M**

**Town of Discovery Bay  
Wastewater Rate Study**

WASTEWATER	Proposed FY 2019/20		Proposed FY 2020/21		Proposed FY 2021/22		Proposed FY 2022/23		Proposed FY 2023/24		Proposed FY 2024/25	
	Monthly (\$/month)	Yearly (\$/year)										
<b>Residential Unmetered</b>												
Single Family - Each DU	\$82.55	\$990.63	\$86.17	\$1,034.04	\$90.48	\$1,085.76	\$95.00	\$1,140.00	\$95.95	\$1,151.40	\$96.91	\$1,162.92
Multiple Family/Condos - Each DU	\$61.92	\$743.03	\$64.93	\$779.22	\$68.10	\$817.17	\$71.41	\$856.97	\$74.89	\$898.71	\$78.54	\$942.48
Vacant	\$18.67	\$224.00	\$18.67	\$224.00	\$18.67	\$224.00	\$18.67	\$224.00	\$18.67	\$224.00	\$18.67	\$224.00
<b>Nonresidential Metered</b>	Use (\$/ccf)											
Business/Government/Clubs	\$5.734		\$6.194		\$6.692		\$7.229		\$7.810		\$8.437	
Restaurants/Bars/Dining Facilities	\$16.793		\$17.790		\$18.846		\$19.965		\$21.150		\$22.405	
Schools	\$5.161		\$5.590		\$6.055		\$6.558		\$7.103		\$7.693	
Other Domestic Strength Users	\$5.734		\$6.194		\$6.692		\$7.229		\$7.810		\$8.437	

DU = Dwelling Unit

ccf = 100 cubic feet = 748 gallons

WASTEWATER	Proposed FY 2019/20		Proposed FY 2020/21		Proposed FY 2021/22		Proposed FY 2022/23		Proposed FY 2023/24		Proposed FY 2024/25	
	Monthly (\$/month)	Yearly (\$/year)										
<b>Residential Unmetered</b>												
Single Family - Each DU			4%	4%	5%	5%	5%	5%	1%	1%	1%	1%
Multiple Family/Condos - Each DU			5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Vacant			0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
<b>Nonresidential Metered</b>			Use (\$/ccf)									
Business/Government/Clubs			8%		8%		8%		8%		8%	
Restaurants/Bars/Dining Facilities			6%		6%		6%		6%		6%	
Schools			8%		8%		8%		8%		8%	
Other Domestic Strength Users			8%		8%		8%		8%		8%	

DU = Dwelling Unit

ccf = 100 cubic feet = 748 gallons

Note: This rate plan does not designate which projects are repair and rehabilitation projects and which are expansion projects to meet the needs of new development. Capacity fee revenues can only be used to fund expansion projects and are estimated based on 34 EDUs in FY2019/20 and 10 new EDUs per year thereafter. Project costs escalated by 3% annually.

**Table 7: Wastewater Capital Cash Flows - OPTION 2: \$5M**

	Current FY2019/20	Projected FY2020/21	Projected FY2021/22	Projected FY2022/23	Projected FY2023/24	Projected FY2024/25
Emergency Reserves	1,800,600	1,800,600	1,800,600	1,800,600	1,800,600	1,800,600
Infrastructure Replacement	<u>2,082,400</u>	<u>4,314,300</u>	<u>10,080,800</u>	<u>2,458,200</u>	<u>26,200</u>	<u>609,900</u>
<b>Beginning Balance</b>	3,883,000	6,114,900	11,881,400	4,258,800	1,826,800	2,410,500
<b>Revenues</b>						
Capacity Fees (\$12,030/EDU)	168,400	120,300	120,300	120,300	120,300	120,300
Transfer from Operating	3,500,000	2,000,000	2,500,000	2,550,000	1,500,000	1,500,000
New Debt Proceeds	<u>0</u>	<u>5,000,000</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
<b>Total Revenues</b>	3,668,400	7,120,300	2,620,300	2,670,300	1,620,300	1,620,300
<b>Capital Improvements</b>						
WWTP Plant 1 Refurbishment	192,100	183,500	3,707,500	390,200	0	0
Denitrification	383,400	440,000	4,265,100	4,466,200	0	0
<b>Lift Stations</b>						
Lift Stations J, S, H	0	154,500	0	0	0	0
Lift Stations A, C, D, E	<u>0</u>	<u>0</u>	<u>212,200</u>	<u>0</u>	<u>0</u>	<u>0</u>
<b>Total Lift Stations</b>	0	154,500	212,200	0	0	0
<b>Clarifier Rehab</b>						
Plant 2 Clarifier #3 Rehabilitation	5,000	5,200	148,500	0	0	0
Clarifier 1 & 2 RAS Pump and Check Valves	0	0	0	0	336,500	0
Clarifier #4 Repair (cement)	<u>0</u>	<u>0</u>	<u>10,600</u>	<u>0</u>	<u>0</u>	<u>0</u>
<b>Total Clarifier Rehab</b>	5,000	5,200	159,100	0	336,500	0
<b>Additional Projects and Maintenance</b>						
Plant 2 RAS & WAS Pumping System	25,000	0	0	0	148,600	0
Replace Lagoon Dredge & Conduits	0	113,300	0	0	0	0
CCTV Van (portable and push camera)	70,000	0	0	0	0	0
Install Screen Headworks at Plant #2	25,000	0	0	245,900	0	0
Minor Rehab to Piping at Plant #1	20,000	0	244,000	0	0	0
Outfall Diffuser Repairs	<u>500,000</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
<b>Total Additional Projects and Maintenance</b>	640,000	113,300	244,000	245,900	148,600	0
<b>Other Master Plan Projects</b>						
Emergency Storage Drain to Pump Sta. W	0	0	0	0	0	86,900
Solids Handling Improvements	0	0	0	0	0	208,700
WAS Pumps and Check Valves Replacement	0	0	0	0	0	124,000
Collection System Pump Stations	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>202,600</u>	<u>0</u>
<b>Total Other Master Plan Projects</b>	0	0	0	0	202,600	419,600
Mainline Piping Replacement	0	0	0	0	281,400	0
<b>Building Rehab or Relocation</b>						
Island Building by Well 1B	90,000	0	0	0	0	0
Move District Main Office Building	<u>0</u>	<u>247,200</u>	<u>1,655,000</u>	<u>0</u>	<u>0</u>	<u>0</u>
<b>Total Relocation</b>	90,000	247,200	1,655,000	0	0	0
<b>Vehicle &amp; Equipment Purchases</b>						
New Truck	24,000	24,700	0	0	0	0
Woodchipper or Firebox	<u>30,000</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
<b>Total Vehicle &amp; Equipment</b>	54,000	24,700	0	0	0	0
<b>District Security</b>						
Cyber Security	0	92,700	0	0	67,500	0
Phase 1	0	0	0	0	0	0
Phase 2	72,000	0	0	0	0	0
Phase 3	<u>0</u>	<u>92,700</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
<b>Total District Security</b>	72,000	185,400	0	0	67,500	0
<b>Total Capital Improvements</b>	1,436,500	1,353,800	10,242,900	5,102,300	1,036,600	419,600
<b>Total Net Revenues</b>	2,231,900	5,766,500	(7,622,600)	(2,432,000)	583,700	1,200,700
<b>Ending Balance</b>	6,114,900	11,881,400	4,258,800	1,826,800	2,410,500	3,611,200

**Table 8: Wastewater Operating Cash Flows – OPTION 2: \$5M**  
**Town of Discovery Bay**  
**Wastewater Rate Study**

	<b>Current FY2019/20</b>	<b>Projected FY2020/21</b>	<b>Projected FY2021/22</b>	<b>Projected FY2022/23</b>	<b>Projected FY2023/24</b>	<b>Projected FY2024/25</b>
<b>Beginning balance</b>	\$4,387,000	\$3,326,400	\$2,991,800	\$2,112,400	\$1,445,200	\$1,836,700
Rate Increase		5.00%	5.00%	5.00%	1.00%	1.00%
<b>Revenues</b>						
Wastewater service						
Zone 9 Reimbursement	243,000	243,000	243,000	243,000	243,000	243,000
Other & Misc	17,300	17,300	17,300	17,300	17,300	17,300
Property Taxes (unmetered)	6,021,200	6,322,300	6,638,400	6,970,300	7,040,000	7,110,400
New Customers	0	(33,000)	(33,000)	(32,000)	(16,000)	0
Vacant	13,900	24,800	36,900	50,200	62,200	74,400
Metered sewer flow	<u>17,000</u>	<u>17,000</u>	<u>17,000</u>	<u>17,000</u>	<u>17,000</u>	<u>17,000</u>
<b>Total revenues</b>	6,312,400	6,591,400	6,919,600	7,265,800	7,363,500	7,462,100
% increase in expenses			3.0%	3.0%	3.0%	3.0%
<b>Expenses</b>						
Operating Expenses						
Admin & Inter Govt. & Board	332,000	450,000	450,000	464,000	478,000	492,000
Staffing & Consulting Serv	593,000	1,090,000	1,090,000	1,090,000	1,090,000	1,090,000
Operations & Maint	334,000	538,000	554,000	571,000	588,000	606,000
Utilities	536,000	673,000	693,000	714,000	735,000	757,000
Service Contract	<u>977,000</u>	<u>1,075,000</u>	<u>1,107,000</u>	<u>1,140,000</u>	<u>1,175,000</u>	<u>1,210,000</u>
Total Operating Expenses	2,772,000	3,826,000	3,894,000	3,979,000	4,066,000	4,155,000
Net Operating Revenues	3,540,400	2,765,400	3,025,600	3,286,800	3,297,500	3,307,100
Debt Service [1]						
2012 Bonds Debt Service	741,000	743,000	744,000	740,000	745,000	743,000
2017 Bonds Debt Service	360,000	357,000	354,000	357,000	354,000	355,000
New Debt [2]	<u>0</u>	<u>0</u>	<u>307,000</u>	<u>307,000</u>	<u>307,000</u>	<u>307,000</u>
Total Debt Service	1,101,000	1,100,000	1,405,000	1,404,000	1,406,000	1,405,000
Debt Service Coverage	3.22	2.51	2.15	2.34	2.35	2.35
<b>Total Expenses</b>	3,873,000	4,926,000	5,299,000	5,383,000	5,472,000	5,560,000
<b>Net Revenues</b>	2,439,400	1,665,400	1,620,600	1,882,800	1,891,500	1,902,100
<b>Transfer to Capital Fund</b>	3,500,000	2,000,000	2,500,000	2,550,000	1,500,000	1,500,000
<b>O&amp;M Ending balance</b>	3,326,400	2,991,800	2,112,400	1,445,200	1,836,700	2,238,800
<b>O&amp;M Minimum balance target [3]</b>	924,000	1,275,000	1,298,000	1,326,000	1,355,000	1,385,000

1 - Based on year ended December 1

2 - Estimated by Brandis Tallman at 4.5% over 30 years

3 - 4 months O&M expenses

**Table 9: Proposed Wastewater Rates and Charges - OPTION 3: \$7.5M**  
**Town of Discovery Bay**  
**Wastewater Rate Study**

WASTEWATER	Proposed FY 2019/20		Proposed FY 2020/21		Proposed FY 2021/22		Proposed FY 2022/23		Proposed FY 2023/24		Proposed FY 2024/25	
	Monthly (\$/month)	Yearly (\$/year)										
<b>Residential Unmetered</b>												
Single Family - Each DU	\$82.55	\$990.63	\$83.52	\$1,002.24	\$85.02	\$1,020.24	\$86.55	\$1,038.60	\$88.11	\$1,057.32	\$89.70	\$1,076.40
Multiple Family/Condos - Each DU	\$61.92	\$743.03	\$64.00	\$768.01	\$66.15	\$793.82	\$68.38	\$820.51	\$70.67	\$848.09	\$73.05	\$876.60
Vacant	\$18.67	\$224.00	\$18.67	\$224.00	\$18.67	\$224.00	\$18.67	\$224.00	\$18.67	\$224.00	\$18.67	\$224.00
<b>Nonresidential Metered</b>	Use (\$/ccf)											
Business/Government/Clubs	\$5.734		\$6.083		\$6.453		\$6.846		\$7.263		\$7.705	
Restaurants/Bars/Dining Facilities	\$16.793		\$17.454		\$18.141		\$18.855		\$19.598		\$20.369	
Schools	\$5.161		\$5.491		\$5.843		\$6.217		\$6.615		\$7.039	
Other Domestic Strength Users	\$5.734		\$6.083		\$6.453		\$6.846		\$7.263		\$7.705	

DU = Dwelling Unit  
ccf = 100 cubic feet = 748 gallons

WASTEWATER	Proposed FY 2019/20		Proposed FY 2020/21		Proposed FY 2021/22		Proposed FY 2022/23		Proposed FY 2023/24		Proposed FY 2024/25	
	Monthly (\$/month)	Yearly (\$/year)										
<b>Residential Unmetered</b>												
Single Family - Each DU			1.2%	1.2%	1.8%	1.8%	1.8%	1.8%	1.8%	1.8%	1.8%	1.8%
Multiple Family/Condos - Each DU			3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Vacant			0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
<b>Nonresidential Metered</b>			Use (\$/ccf)									
Business/Government/Clubs			6%		6%		6%		6%		6%	
Restaurants/Bars/Dining Facilities			4%		4%		4%		4%		4%	
Schools			6%		6%		6%		6%		6%	
Other Domestic Strength Users			6%		6%		6%		6%		6%	

DU = Dwelling Unit  
ccf = 100 cubic feet = 748 gallons

Note: This rate plan does not designate which projects are repair and rehabilitation projects and which are expansion projects to meet the needs of new development. Capacity fee revenues can only be used to fund expansion projects and are estimated based on 34 EDUs in FY2019/20 and 10 new EDUs per year thereafter. Project costs escalated by 3% annually.

**Table 10: Wastewater Capital Cash Flows - OPTION 3: \$7.5M**

	Current FY2019/20	Projected FY2020/21	Projected FY2021/22	Projected FY2022/23	Projected FY2023/24	Projected FY2024/25
Emergency Reserves	1,800,600	1,800,600	1,800,600	1,800,600	1,800,600	1,800,600
Infrastructure Replacement	<u>2,082,400</u>	<u>4,314,300</u>	<u>12,130,800</u>	<u>3,508,200</u>	<u>26,200</u>	<u>609,900</u>
<b>Beginning Balance</b>	3,883,000	6,114,900	13,931,400	5,308,800	1,826,800	2,410,500
<b>Revenues</b>						
Capacity Fees (\$12,030/EDU)	168,400	120,300	120,300	120,300	120,300	120,300
Transfer from Operating	3,500,000	1,550,000	1,500,000	1,500,000	1,500,000	1,500,000
New Debt Proceeds	<u>0</u>	<u>7,500,000</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
<b>Total Revenues</b>	3,668,400	9,170,300	1,620,300	1,620,300	1,620,300	1,620,300
<b>Capital Improvements</b>						
WWTP Plant 1 Refurbishment	192,100	183,500	3,707,500	390,200	0	0
Denitrification	383,400	440,000	4,265,100	4,466,200	0	0
<b>Lift Stations</b>						
Lift Stations J, S, H	0	154,500	0	0	0	0
Lift Stations A, C, D, E	<u>0</u>	<u>0</u>	<u>212,200</u>	<u>0</u>	<u>0</u>	<u>0</u>
<b>Total Lift Stations</b>	0	154,500	212,200	0	0	0
<b>Clarifier Rehab</b>						
Plant 2 Clarifier #3 Rehabilitation	5,000	5,200	148,500	0	0	0
Clarifier 1 & 2 RAS Pump and Check Valves	0	0	0	0	336,500	0
Clarifier #4 Repair (cement)	<u>0</u>	<u>0</u>	<u>10,600</u>	<u>0</u>	<u>0</u>	<u>0</u>
<b>Total Clarifier Rehab</b>	5,000	5,200	159,100	0	336,500	0
<b>Additional Projects and Maintenance</b>						
Plant 2 RAS & WAS Pumping System	25,000	0	0	0	148,600	0
Replace Lagoon Dredge & Conduits	0	113,300	0	0	0	0
CCTV Van (portable and push camera)	70,000	0	0	0	0	0
Install Screen Headworks at Plant #2	25,000	0	0	245,900	0	0
Minor Rehab to Piping at Plant #1	20,000	0	244,000	0	0	0
Outfall Diffuser Repairs	<u>500,000</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
<b>Total Additional Projects and Maintenance</b>	640,000	113,300	244,000	245,900	148,600	0
<b>Other Master Plan Projects</b>						
Emergency Storage Drain to Pump Sta. W	0	0	0	0	0	86,900
Solids Handling Improvements	0	0	0	0	0	208,700
WAS Pumps and Check Valves Replacement	0	0	0	0	0	124,000
Collection System Pump Stations	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>202,600</u>	<u>0</u>
<b>Total Other Master Plan Projects</b>	0	0	0	0	202,600	419,600
Mainline Piping Replacement	0	0	0	0	281,400	0
<b>Building Rehab or Relocation</b>						
Island Building by Well 1B	90,000	0	0	0	0	0
Move District Main Office Building	<u>0</u>	<u>247,200</u>	<u>1,655,000</u>	<u>0</u>	<u>0</u>	<u>0</u>
<b>Total Relocation</b>	90,000	247,200	1,655,000	0	0	0
<b>Vehicle &amp; Equipment Purchases</b>						
New Truck	24,000	24,700	0	0	0	0
Woodchipper or Firebox	<u>30,000</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
<b>Total Vehicle &amp; Equipment</b>	54,000	24,700	0	0	0	0
<b>District Security</b>						
Cyber Security	0	92,700	0	0	67,500	0
Phase 1	0	0	0	0	0	0
Phase 2	72,000	0	0	0	0	0
Phase 3	<u>0</u>	<u>92,700</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
<b>Total District Security</b>	72,000	185,400	0	0	67,500	0
<b>Total Capital Improvements</b>	1,436,500	1,353,800	10,242,900	5,102,300	1,036,600	419,600
<b>Total Net Revenues</b>	2,231,900	7,816,500	(8,622,600)	(3,482,000)	583,700	1,200,700
<b>Ending Balance</b>	6,114,900	13,931,400	5,308,800	1,826,800	2,410,500	3,611,200

**Table 11: Wastewater Operating Cash Flows – OPTION 3: \$7.5M**  
**Town of Discovery Bay**  
**Wastewater Rate Study**

	<b>Current FY2019/20</b>	<b>Projected FY2020/21</b>	<b>Projected FY2021/22</b>	<b>Projected FY2022/23</b>	<b>Projected FY2023/24</b>	<b>Projected FY2024/25</b>
<b>Beginning balance</b>	\$4,387,000	\$3,326,400	\$3,252,400	\$2,828,900	\$2,450,700	\$2,117,200
Rate Increase		1.80%	1.80%	1.80%	1.80%	1.80%
<b>Revenues</b>						
Wastewater service						
Zone 9 Reimbursement	243,000	243,000	243,000	243,000	243,000	243,000
Other & Misc	17,300	17,300	17,300	17,300	17,300	17,300
Property Taxes (unmetered)	6,021,200	6,129,600	6,239,900	6,352,200	6,466,500	6,582,900
New Customers	0	(29,000)	(23,000)	(17,000)	(9,000)	(2,000)
Vacant	13,900	24,100	34,700	45,700	57,100	68,900
Metered sewer flow	<u>17,000</u>	<u>17,000</u>	<u>17,000</u>	<u>17,000</u>	<u>17,000</u>	<u>17,000</u>
<b>Total revenues</b>	6,312,400	6,402,000	6,528,900	6,658,200	6,791,900	6,927,100
% increase in expenses			3.0%	3.0%	3.0%	3.0%
<b>Expenses</b>						
Operating Expenses						
Admin & Inter Govt. & Board	332,000	450,000	450,000	464,000	478,000	492,000
Staffing & Consulting Serv	593,000	1,090,000	1,090,000	1,090,000	1,090,000	1,090,000
Operations & Maint	334,000	538,000	554,000	571,000	588,000	606,000
Utilities	536,000	673,000	693,000	714,000	735,000	757,000
Service Contract	<u>977,000</u>	<u>1,075,000</u>	<u>1,107,000</u>	<u>1,140,000</u>	<u>1,175,000</u>	<u>1,210,000</u>
Total Operating Expenses	2,772,000	3,826,000	3,894,000	3,979,000	4,066,000	4,155,000
Net Operating Revenues	3,540,400	2,576,000	2,634,900	2,679,200	2,725,900	2,772,100
Debt Service [1]						
2012 Bonds Debt Service	741,000	743,000	744,000	740,000	745,000	743,000
2017 Bonds Debt Service	360,000	357,000	354,000	357,000	354,000	355,000
New Debt [2]	<u>0</u>	<u>0</u>	<u>460,400</u>	<u>460,400</u>	<u>460,400</u>	<u>460,400</u>
Total Debt Service	1,101,000	1,100,000	1,558,400	1,557,400	1,559,400	1,558,400
Debt Service Coverage	3.22	2.34	1.69	1.72	1.75	1.78
<b>Total Expenses</b>	3,873,000	4,926,000	5,452,400	5,536,400	5,625,400	5,713,400
<b>Net Revenues</b>	2,439,400	1,476,000	1,076,500	1,121,800	1,166,500	1,213,700
<b>Transfer to Capital Fund</b>	3,500,000	1,550,000	1,500,000	1,500,000	1,500,000	1,500,000
<b>O&amp;M Ending balance</b>	3,326,400	3,252,400	2,828,900	2,450,700	2,117,200	1,830,900
<b>O&amp;M Minimum balance target [3]</b>	924,000	1,275,000	1,298,000	1,326,000	1,355,000	1,385,000

1 - Based on year ended December 1

2 - Estimated by Brandis Tallman at 4.5% over 30 years

3 - 4 months O&M expenses

**Table 12: Proposed Wastewater Rates and Charges - OPTION 4: \$10M**

**Town of Discovery Bay  
Wastewater Rate Study**

WASTEWATER	Proposed FY 2019/20		Proposed FY 2020/21		Proposed FY 2021/22		Proposed FY 2022/23		Proposed FY 2023/24		Proposed FY 2024/25	
	Monthly (\$/month)	Yearly (\$/year)										
<b>Residential Unmetered</b>												
Single Family - Each DU	\$82.55	\$990.63	\$83.34	\$1,000.08	\$84.59	\$1,015.08	\$85.86	\$1,030.32	\$87.15	\$1,045.80	\$88.46	\$1,061.52
Multiple Family/Condos - Each DU	\$61.92	\$743.03	\$63.89	\$766.64	\$65.92	\$790.99	\$68.01	\$816.12	\$70.17	\$842.05	\$72.40	\$868.80
Vacant	\$18.67	\$224.00	\$18.67	\$224.00	\$18.67	\$224.00	\$18.67	\$224.00	\$18.67	\$224.00	\$18.67	\$224.00
<b>Nonresidential Metered</b>	Use (\$/ccf)											
Business/Government/Clubs	\$5.734		\$6.050		\$6.384		\$6.737		\$7.109		\$7.501	
Restaurants/Bars/Dining Facilities	\$16.793		\$17.337		\$17.899		\$18.479		\$19.078		\$19.696	
Schools	\$5.161		\$5.462		\$5.781		\$6.118		\$6.475		\$6.853	
Other Domestic Strength Users	\$5.734		\$6.050		\$6.384		\$6.737		\$7.109		\$7.501	

DU = Dwelling Unit

ccf = 100 cubic feet = 748 gallons

WASTEWATER	Proposed FY 2019/20		Proposed FY 2020/21		Proposed FY 2021/22		Proposed FY 2022/23		Proposed FY 2023/24		Proposed FY 2024/25	
	Monthly (\$/month)	Yearly (\$/year)										
<b>Residential Unmetered</b>												
Single Family - Each DU			1.0%	1.0%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Multiple Family/Condos - Each DU			3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Vacant			0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
<b>Nonresidential Metered</b>			Use (\$/ccf)									
Business/Government/Clubs			6%		6%		6%		6%		6%	
Restaurants/Bars/Dining Facilities			3%		3%		3%		3%		3%	
Schools			6%		6%		6%		6%		6%	
Other Domestic Strength Users			6%		6%		6%		6%		6%	

DU = Dwelling Unit

ccf = 100 cubic feet = 748 gallons

Note: This rate plan does not designate which projects are repair and rehabilitation projects and which are expansion projects to meet the needs of new development. Capacity fee revenues can only be used to fund expansion projects and are estimated based on 34 EDUs in FY2019/20 and 10 new EDUs per year thereafter. Project costs escalated by 3% annually.

**Table 13: Wastewater Capital Cash Flows - OPTION 4: \$10M**

	Current FY2019/20	Projected FY2020/21	Projected FY2021/22	Projected FY2022/23	Projected FY2023/24	Projected FY2024/25
Emergency Reserves	1,800,600	1,800,600	1,800,600	1,800,600	1,800,600	1,800,600
Infrastructure Replacement	<u>2,082,400</u>	<u>4,314,300</u>	<u>14,080,800</u>	<u>4,958,200</u>	<u>976,200</u>	<u>1,159,900</u>
<b>Beginning Balance</b>	3,883,000	6,114,900	15,881,400	6,758,800	2,776,800	2,960,500
<b>Revenues</b>						
Capacity Fees (\$12,030/EDU)	168,400	120,300	120,300	120,300	120,300	120,300
Transfer from Operating	3,500,000	1,000,000	1,000,000	1,000,000	1,100,000	1,100,000
New Debt Proceeds	<u>0</u>	<u>10,000,000</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
<b>Total Revenues</b>	3,668,400	11,120,300	1,120,300	1,120,300	1,220,300	1,220,300
<b>Capital Improvements</b>						
WWTP Plant 1 Refurbishment	192,100	183,500	3,707,500	390,200	0	0
Denitrification	383,400	440,000	4,265,100	4,466,200	0	0
<b>Lift Stations</b>						
Lift Stations J, S, H	0	154,500	0	0	0	0
Lift Stations A, C, D, E	<u>0</u>	<u>0</u>	<u>212,200</u>	<u>0</u>	<u>0</u>	<u>0</u>
<b>Total Lift Stations</b>	0	154,500	212,200	0	0	0
<b>Clarifier Rehab</b>						
Plant 2 Clarifier #3 Rehabilitation	5,000	5,200	148,500	0	0	0
Clarifier 1 & 2 RAS Pump and Check Valves	0	0	0	0	336,500	0
Clarifier #4 Repair (cement)	<u>0</u>	<u>0</u>	<u>10,600</u>	<u>0</u>	<u>0</u>	<u>0</u>
<b>Total Clarifier Rehab</b>	5,000	5,200	159,100	0	336,500	0
<b>Additional Projects and Maintenance</b>						
Plant 2 RAS & WAS Pumping System	25,000	0	0	0	148,600	0
Replace Lagoon Dredge & Conduits	0	113,300	0	0	0	0
CCTV Van (portable and push camera)	70,000	0	0	0	0	0
Install Screen Headworks at Plant #2	25,000	0	0	245,900	0	0
Minor Rehab to Piping at Plant #1	20,000	0	244,000	0	0	0
Outfall Diffuser Repairs	<u>500,000</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
<b>Total Additional Projects and Maintenance</b>	640,000	113,300	244,000	245,900	148,600	0
<b>Other Master Plan Projects</b>						
Emergency Storage Drain to Pump Sta. W	0	0	0	0	0	86,900
Solids Handling Improvements	0	0	0	0	0	208,700
WAS Pumps and Check Valves Replacement	0	0	0	0	0	124,000
Collection System Pump Stations	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>202,600</u>	<u>0</u>
<b>Total Other Master Plan Projects</b>	0	0	0	0	202,600	419,600
Mainline Piping Replacement	0	0	0	0	281,400	0
<b>Building Rehab or Relocation</b>						
Island Building by Well 1B	90,000	0	0	0	0	0
Move District Main Office Building	<u>0</u>	<u>247,200</u>	<u>1,655,000</u>	<u>0</u>	<u>0</u>	<u>0</u>
<b>Total Relocation</b>	90,000	247,200	1,655,000	0	0	0
<b>Vehicle &amp; Equipment Purchases</b>						
New Truck	24,000	24,700	0	0	0	0
Woodchipper or Firebox	<u>30,000</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
<b>Total Vehicle &amp; Equipment</b>	54,000	24,700	0	0	0	0
<b>District Security</b>						
Cyber Security	0	92,700	0	0	67,500	0
Phase 1	0	0	0	0	0	0
Phase 2	72,000	0	0	0	0	0
Phase 3	<u>0</u>	<u>92,700</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
<b>Total District Security</b>	72,000	185,400	0	0	67,500	0
<b>Total Capital Improvements</b>	1,436,500	1,353,800	10,242,900	5,102,300	1,036,600	419,600
<b>Total Net Revenues</b>	2,231,900	9,766,500	(9,122,600)	(3,982,000)	183,700	800,700
<b>Ending Balance</b>	6,114,900	15,881,400	6,758,800	2,776,800	2,960,500	3,761,200

**Table 14: Wastewater Operating Cash Flows – OPTION 4: \$10M**  
**Town of Discovery Bay**  
**Wastewater Rate Study**

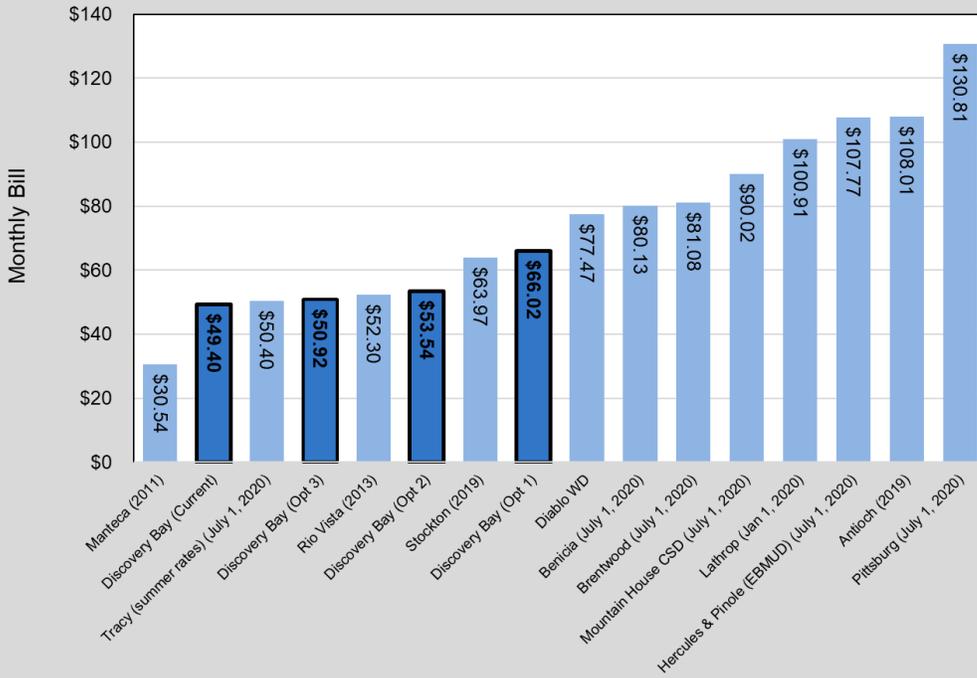
	<b>Current FY2019/20</b>	<b>Projected FY2020/21</b>	<b>Projected FY2021/22</b>	<b>Projected FY2022/23</b>	<b>Projected FY2023/24</b>	<b>Projected FY2024/25</b>
<b>Beginning balance</b>	\$4,387,000	\$3,326,400	\$3,788,200	\$3,678,300	\$3,595,200	\$3,435,700
Rate Increase		1.50%	1.50%	1.50%	1.50%	1.50%
<b>Revenues</b>						
Wastewater service						
Zone 9 Reimbursement	243,000	243,000	243,000	243,000	243,000	243,000
Other & Misc	17,300	17,300	17,300	17,300	17,300	17,300
Property Taxes (unmetered)	6,021,200	6,111,500	6,203,200	6,296,200	6,390,600	6,486,500
New Customers	0	(25,000)	(19,000)	(12,000)	(5,000)	0
Vacant	13,900	24,000	34,500	45,300	56,500	67,900
Metered sewer flow	<u>17,000</u>	<u>17,000</u>	<u>17,000</u>	<u>17,000</u>	<u>17,000</u>	<u>17,000</u>
<b>Total revenues</b>	6,312,400	6,387,800	6,496,000	6,606,800	6,719,400	6,831,700
% increase in expenses			3.0%	3.0%	3.0%	3.0%
<b>Expenses</b>						
Operating Expenses						
Admin & Inter Govt. & Board	332,000	450,000	450,000	464,000	478,000	492,000
Staffing & Consulting Serv	593,000	1,090,000	1,090,000	1,090,000	1,090,000	1,090,000
Operations & Maint	334,000	538,000	554,000	571,000	588,000	606,000
Utilities	536,000	673,000	693,000	714,000	735,000	757,000
Service Contract	<u>977,000</u>	<u>1,075,000</u>	<u>1,107,000</u>	<u>1,140,000</u>	<u>1,175,000</u>	<u>1,210,000</u>
Total Operating Expenses	2,772,000	3,826,000	3,894,000	3,979,000	4,066,000	4,155,000
Net Operating Revenues	3,540,400	2,561,800	2,602,000	2,627,800	2,653,400	2,676,700
Debt Service [1]						
2012 Bonds Debt Service	741,000	743,000	744,000	740,000	745,000	743,000
2017 Bonds Debt Service	360,000	357,000	354,000	357,000	354,000	355,000
New Debt	<u>0</u>	<u>0</u>	<u>613,900</u>	<u>613,900</u>	<u>613,900</u>	<u>613,900</u>
Total Debt Service	1,101,000	1,100,000	1,711,900	1,710,900	1,712,900	1,711,900
Debt Service Coverage	3.22	2.33	1.52	1.54	1.55	1.56
<b>Total Expenses</b>	3,873,000	4,926,000	5,605,900	5,689,900	5,778,900	5,866,900
<b>Net Revenues</b>	2,439,400	1,461,800	890,100	916,900	940,500	964,800
<b>Transfer to Capital Fund</b>	3,500,000	1,000,000	1,000,000	1,000,000	1,100,000	1,100,000
<b>O&amp;M Ending balance</b>	3,326,400	3,788,200	3,678,300	3,595,200	3,435,700	3,300,500
<b>O&amp;M Minimum balance target [3]</b>	924,000	1,275,000	1,298,000	1,326,000	1,355,000	1,385,000

1 - Based on year ended December 1

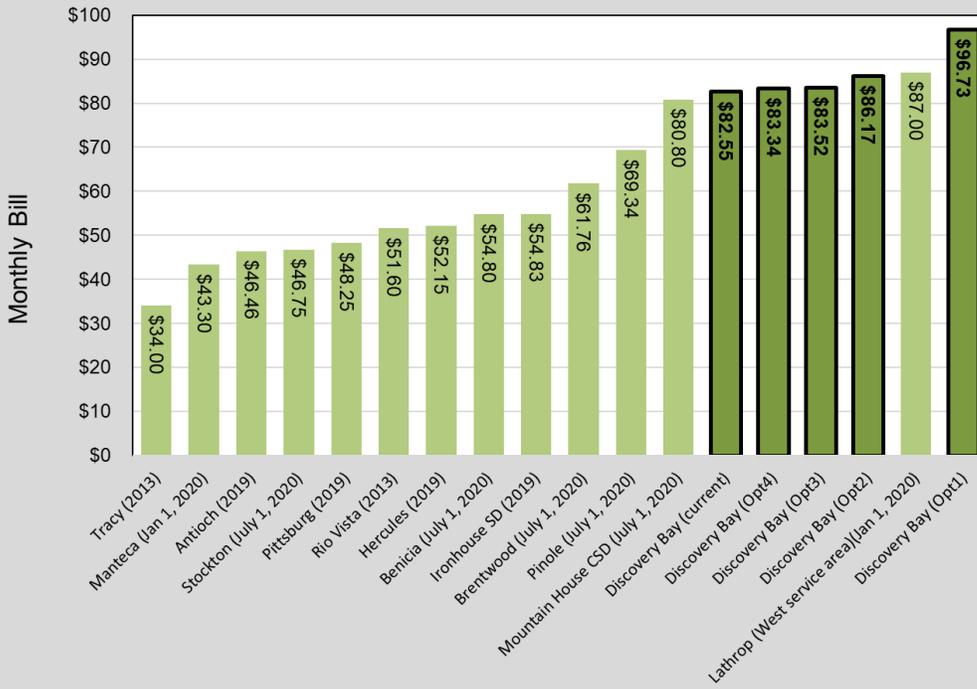
2 - Estimated by Brandis Tallman at 4.5% over 30 years

3 - 4 months O&M expenses

### Single Family Residential Water Bill Survey (1" meter, 13 ccf monthly use)



### Single Family Residential Wastewater Bill Survey



### Single Family Residential Water and Wastewater Bill Survey

